

# КАТАЛОГ(ОБОРУДОВАНИЕ КОНДИЦИОНИРОВАНИЯ И ХОЛОДИЛЬНОЕ ОБОРУДОВАНИЕ)



**ОООТЛК "СУДОКОМПЛЕКТ"**  
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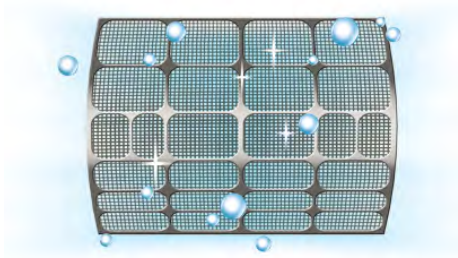
R410a Eco-Friendly Refrigerant

The Eco-friendly, fluoride-free refrigerant R410a protects the ozone layer, ensures higher efficiency and enhances energy-saving.



Washable Filter

Patented disassembling technology offers easier detachment, so filter mesh may be cleaned at will.



Faster Air Supply

Shocking Cooling within 30 seconds, and fast heating within 2 minutes. International branded efficient compressor provides strong power for the AC, so as to achieve quick cooling and heating.



R410a environmental refrigerant 50Hz ON/OFF

| Model                     |              |         | 9000BTU      | 12000BTU     | 18000BTU     | 24000BTU     |
|---------------------------|--------------|---------|--------------|--------------|--------------|--------------|
| Power supply              |              | V/Hz/Ph | 220-240/50/1 | 220-240/50/1 | 220-240/50/1 | 220-240/50/1 |
| Capacity                  | Cooling      | Btu/h   | 9000         | 12000        | 18000        | 24000        |
|                           |              | W       | 2700         | 3300         | 5100         | 7200         |
|                           | Heating      | Btu/h   | 9000         | 12300        | 19000        | 25000        |
|                           |              | W       | 2750         | 3600         | 5500         | 7400         |
| Power input               | Cooling      | W       | 840          | 1025         | 1590         | 2240         |
|                           | Heating      | W       | 760          | 995          | 1600         | 2160         |
| Operating Current         | Cooling      | A       | 3.8          | 4.7          | 6.8          | 10.1         |
|                           | Heating      | A       | 3.5          | 4.5          | 6.9          | 9.7          |
| EER                       |              | W/W     | 3.2          | 3.2          | 3.2          | 3.2          |
| COP                       |              | W/W     | 3.6          | 3.6          | 3.4          | 3.4          |
| Energy Rate               |              |         | A            | A            | A            | A            |
| Air Flow                  | Indoor unit  | m3/h    | 500          | 550          | 800          | 1050         |
| Noise Level               | Indoor unit  | dB(A)   | 30~39        | 29~39        | 37~44        | 42~48        |
|                           | Outdoor unit | dB(A)   | 51           | 52           | 54           | 56           |
| Net Dimension (WxHxD)     | Indoor unit  | mm      | 745x250x210  | 780x276x202  | 900x296x222  | 1080x302x220 |
|                           | Outdoor unit | mm      | 700x225x500  | 715x235x540  | 795x540x255  | 870x310x700  |
| Net Weight                | Indoor unit  | kg      | 9            | 10           | 13           | 16           |
|                           | Outdoor unit | kg      | 25           | 28           | 38           | 58           |
| Packing Dimension (WxHxD) | Indoor unit  | mm      | 835x330x278  | 960x367x305  | 990x377x318  | 1275x392x318 |
|                           | Outdoor unit | mm      | 825x550x320  | 851x600x335  | 920x595x335  | 990x780x410  |
| Gross Weight              | Indoor unit  | kg      | 11           | 12           | 15           | 20           |
|                           | Outdoor unit | kg      | 29           | 33           | 42           | 64           |
| Loading Capacity/40'HQ    |              | sets    | 315          | 246          | 240          | 149          |

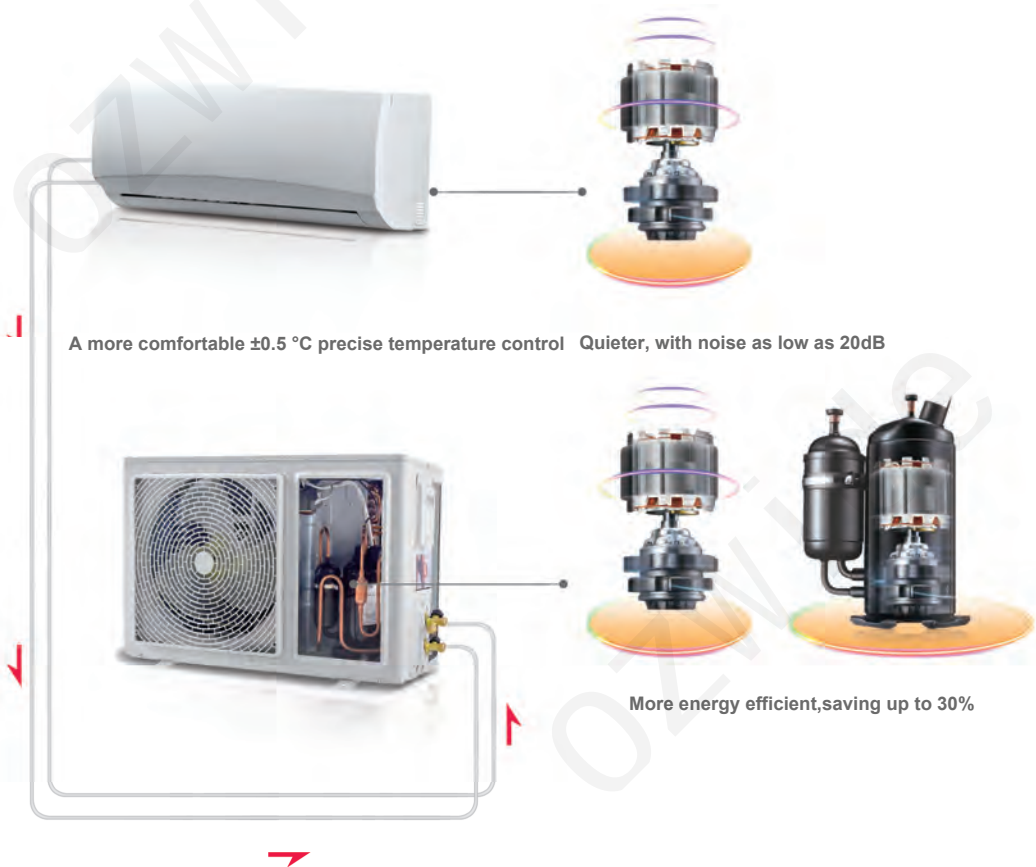
R410a environmental refrigerant 60Hz ON/OFF

| Model                     |              |         | 9000BTU      | 12000BTU     | 18000BTU     | 24000BTU     | 30000BTU     |
|---------------------------|--------------|---------|--------------|--------------|--------------|--------------|--------------|
| Power supply              |              | V/Hz/Ph | 208-230/60/1 | 208-230/60/1 | 208-230/60/1 | 208-230/60/1 | 208-230/60/1 |
| Capacity                  | Cooling      | Btu/h   | 9000         | 12000        | 18000        | 24000        | 30000        |
|                           | Heating      | Btu/h   | -            | -            | -            | -            | -            |
| Power input               | Cooling      | W       | 940          | 1190         | 1980         | 2360         | 3350         |
|                           | Heating      | W       | -            | -            | -            | -            | -            |
| Operating Current         | Cooling      | A       | 4.5          | 5.7          | 9.47         | 11.3         | 15.9         |
|                           | Heating      | A       | -            | -            | -            | -            | -            |
| EER                       |              | W/W     | 2.66         | 2.69         | 2.58         | 2.58         | 2.63         |
| COP                       |              | W/W     | -            | -            | -            | -            | -            |
| Air Flow                  | Indoor unit  | m3/h    | 450          | 500          | 800          | 900          | 1350         |
| Noise Level               | Indoor unit  | dB(A)   | 31~39        | 32~40        | 37~44        | 42~46        | 46~51        |
|                           | Outdoor unit | dB(A)   | 51           | 54           | 54           | 54           | 59           |
| Net Dimension (WxHxD)     | Indoor unit  | mm      | 745x250x210  | 745x250x210  | 900x296x222  | 900x296x222  | 1300x332x245 |
|                           | Outdoor unit | mm      | 700x500x225  | 715x540x235  | 812x540x256  | 850x605x295  | 900x835x330  |
| Net Weight                | Indoor unit  | kg      | 9            | 9            | 13           | 14           | 22           |
|                           | Outdoor unit | kg      | 25           | 28           | 32           | 36           | 65           |
| Packing Dimension (WxHxD) | Indoor unit  | mm      | 835x330x278  | 835x330x278  | 983x377x300  | 1105x377x300 | 1515x428x345 |
|                           | Outdoor unit | mm      | 825x550x320  | 851x600x335  | 920x595x335  | 995x690x415  | 1030x960x440 |
| Gross Weight              | Indoor unit  | kg      | 11           | 11           | 15           | 17.5         | 26           |
|                           | Outdoor unit | kg      | 29           | 33           | 36           | 41           | 73           |
| Loading Capacity/40'HQ    |              | sets    | 310          | 290          | 230          | 170          | 100          |



3D DC Inverter Technology

The high efficiency DC inverter compressor and brushless DC motors, combined with full DC control safeguards motor speed and refrigerant flow through real-time adjustments to changes in the environment, thus ensuring maximum cooling and heating efficiency.



R410a environmental refrigerant 50Hz DC inverter

| Model                     |              |         | 9000BTU      | 12000BTU     | 18000BTU     | 24000BTU     |
|---------------------------|--------------|---------|--------------|--------------|--------------|--------------|
| Power supply              |              | V/Hz/Ph | 220-240/50/1 | 220-240/50/1 | 220-240/50/1 | 220-240/50/1 |
| Capacity                  | Cooling      | Btu/h   | 9000         | 12000        | 18000        | 24000        |
|                           |              | W       | 2650         | 3500         | 5100         | 7000         |
|                           | Heating      | Btu/h   | 9400         | 12600        | 18500        | 25300        |
|                           |              | W       | 2900         | 3700         | 5500         | 7400         |
| Power input               | Cooling      | W       | 490~1100     | 600~1400     | 650~2200     | 700~3000     |
|                           | Heating      | W       | 420~1190     | 600~1300     | 650~2200     | 700~3000     |
| Operating Current         | Cooling      | A       | 2.3~5.4      | 2.6~6.0      | 2.7~8.3      | 3.2~13.6     |
|                           | Heating      | A       | 2.0~5.7      | 2.6~5.8      | 2.7~8.9      | 3.2~13.6     |
| EER                       |              | W/W     | 3.21         | 3.21         | 3.27         | 3.21         |
| COP                       |              | W/W     | 3.62         | 3.61         | 3.62         | 3.61         |
| Air Flow                  | Indoor unit  | m3/h    | 450          | 500          | 850          | 1050         |
| Noise Level               | Indoor unit  | dB(A)   | 30~38        | 30~38        | 39~42        | 42~48        |
|                           | Outdoor unit | dB(A)   | 52           | 52           | 55           | 56           |
| Net Dimension (WxHxD)     | Indoor unit  | mm      | 745x250x210  | 800x280x195  | 900x296x222  | 1080x302x220 |
|                           | Outdoor unit | mm      | 715x540x235  | 715x540x235  | 850x605x295  | 870x700x310  |
| Net Weight                | Indoor unit  | kg      | 9            | 10           | 13           | 16           |
|                           | Outdoor unit | kg      | 28           | 29           | 40           | 56           |
| Packing Dimension (WxHxD) | Indoor unit  | mm      | 835x330x278  | 865x358x275  | 990x377x300  | 1275x392x318 |
|                           | Outdoor unit | mm      | 851x600x335  | 851x600x335  | 995x690x415  | 990x780x410  |
| Gross Weight              | Indoor unit  | kg      | 11           | 12           | 15           | 20           |
|                           | Outdoor unit | kg      | 33           | 33           | 45           | 63           |
| Loading Capacity/40'HQ    |              | sets    | 290          | 280          | 170          | 135          |

R410a environmental refrigerant 60Hz DC Inverter EER≥3.2

| Model                     |              |         | 9000BTU     | 12000BTU    | 18000BTU    | 24000BTU     |
|---------------------------|--------------|---------|-------------|-------------|-------------|--------------|
| Power supply              |              | V/Hz/Ph | 220/60/1    | 220/60/1    | 220/60/1    | 220/60/1     |
| Capacity                  | Cooling      | Btu/h   | 9000        | 12000       | 18000       | 24000        |
|                           | Heating      | Btu/h   | 9000        | 12200       | 18000       | 24000        |
| Power input               | Cooling      | W       | 530~1200    | 530~1430    | 720~1880    | 1000~2800    |
|                           | Heating      | W       | 540~1200    | 580~1480    | 730~1920    | 1000~2750    |
| Operating Current         | Cooling      | A       | 2.5~5.2     | 2.5~6.8     | 3.2~8.5     | 4.8~13.4     |
|                           | Heating      | A       | 2.6~5.4     | 2.7~7.0     | 2.8~8.7     | 4.8~13.2     |
| EER                       |              | W/W     | 3.38        | 3.24        | 3.37        | 3.37         |
| COP                       |              | W/W     | 3.38        | 3.21        | 3.37        | 3.37         |
| Air Flow                  | Indoor unit  | m3/h    | 500         | 500         | 800         | 1050         |
| Noise Level               | Indoor unit  | dB(A)   | 30~38       | 30~40       | 42~46       | 42~48        |
|                           | Outdoor unit | dB(A)   | 52          | 52          | 55          | 56           |
| Net Dimension (WxHxD)     | Indoor unit  | mm      | 800x280x195 | 800x280x195 | 900x296x222 | 1080x302x220 |
|                           | Outdoor unit | mm      | 715x540x235 | 812x540x256 | 850x605x295 | 900x835x330  |
| Net Weight                | Indoor unit  | kg      | 10          | 10          | 14          | 15           |
|                           | Outdoor unit | kg      | 28          | 33          | 40          | 65           |
| Packing Dimension (WxHxD) | Indoor unit  | mm      | 865x358x275 | 865x358x275 | 983x377x300 | 1275x392x318 |
|                           | Outdoor unit | mm      | 851x600x335 | 920x595x335 | 995x690x415 | 1030x960x440 |
| Gross Weight              | Indoor unit  | kg      | 12          | 12          | 16          | 17           |
|                           | Outdoor unit | kg      | 33          | 37          | 45          | 70           |
| Loading Capacity/40'HQ    |              | sets    | 282         | 268         | 170         | 114          |

Fashionable LCD Display

M Floorstanding is equipped with a fashionable display board, which concisely shows all the operation status via LCD screen.



Turbo Mode

This function can boost cooling or heating speed in a short period, and makes the room cool down or heat up rapidly.



Fresh Air

Fresh outside air can be lead into the room via a connection pipe, make air quality healthier.



3D Air Flow

The combination of vertical and horizontal auto swing function ensures an even distribution of air throughout the room.



50Hz ON/OFF

| Model                           |                |           | 24000BTU     | 36000BTU     | 48000BTU      | 60000BTU      |
|---------------------------------|----------------|-----------|--------------|--------------|---------------|---------------|
| Power supply                    |                |           | V/Hz/Ph      | 220-240/50/1 | 220-240/50/1  | 380-415/50/3  |
| Capacity                        | Cooling        | Btu/h     | 24000        | 36000        | 48000         | 60000         |
|                                 |                | kW        | 7.0          | 10.5         | 14.1          | 17.6          |
|                                 | Heating        | Btu/h     | 24000        | 36000        | 48000         | 60000         |
|                                 |                | kW        | 7.0          | 10.5         | 14.1          | 17.6          |
| Power input                     | Cooling        | W         | 2695         | 4040         | 5390          | 6730          |
|                                 | Heating        | W         | 2270         | 3500         | 4830          | 6250          |
| Operating Current               | Cooling        | A         | 12.3         | 18.5         | 9.1           | 11.4          |
|                                 | Heating        | A         | 10.4         | 16.0         | 8.2           | 10.5          |
| EER                             |                | W/W       | 2.61         | 2.61         | 2.61          | 2.61          |
| COP                             |                | W/W       | 3.1          | 3.01         | 2.91          | 2.81          |
| Air Flow (H/M/L)                |                | m3/h      | 1150/950     | 1700/1500    | 1835/1584     | 2388/2020     |
| Noise Level                     | Indoor         | dB(A)     | 48/43        | 53/49        | 53/50         | 54/51         |
|                                 | Outdoor        | dB(A)     | 58           | 61           | 63            | 65            |
| Net Dimension                   | Indoor(WxDxH)  | mm        | 500x315x1700 | 550x418x1824 | 550x418x1824  | 600x455x1934  |
|                                 | Outdoor(WxDxH) | mm        | 845x360x607  | 946x410x810  | 900x350x1170  | 900x350x1170  |
| Packing Dimension               | Body(WxDxH)    | mm        | 615x425x1805 | 1935x655x540 | 1935x655x540  | 2040x745x595  |
|                                 | Panel(WxDxH)   | mm        | 965x395x755  | 1090x500x865 | 1032x443x1307 | 1032x443x1307 |
| Net/Gross Weight                | Indoor         | kg        | 36.2/44      | 53/67        | 53/67         | 64/84         |
|                                 | Outdoor        | kg        | 52/56        | 75/80        | 94.5/99       | 95.5/106      |
| Piping size                     | Liquid         | φmm(inch) | 9.52(3/8")   | 9.52(3/8")   | 9.52(3/8")    | 9.52(3/8")    |
|                                 | Gas            | φmm(inch) | 15.9(5/8")   | 19(3/4")     | 19(3/4")      | 19(3/4")      |
| Applicable area                 |                | m2        | 28-47        | 42-70        | 56-93         | 64-107        |
| Loading Capacity(20'/40'/40'HQ) |                | sets      | 36/75/87     | 22/48/56     | 18/38/50      | 17/43/42      |



50Hz ON/OFF

| Model                           |                |           | 24000BTU     | 42000BTU     | 48000BTU      | 52000BTU      |
|---------------------------------|----------------|-----------|--------------|--------------|---------------|---------------|
| Power supply                    |                |           | V/Hz/Ph      | 220-240/50/1 | 380-415/50/3  | 380-415/50/3  |
| Capacity                        | Cooling        | Btu/h     | 24000        | 42000        | 46000         | 51200         |
|                                 |                | kW        | 7.0          | 12.3         | 13.5          | 15.0          |
|                                 | Heating        | Btu/h     | 27000+7200   | 48000+12000  | 52000+12000   | 60000+12000   |
|                                 |                | kW        | 8.0+2.1      | 14.0+3.5     | 15.2+3.5      | 17.6+3.5      |
| Power input                     | Cooling        | W         | 2503         | 4900         | 5165          | 6050          |
|                                 | Heating        | W         | 2465+2200    | 5190+3500    | 5255+3500     | 5300+3500     |
| Operating Current               | Cooling        | A         | 12           | 9.2          | 9.7           | 10.5          |
|                                 | Heating        | A         | 11.8+10.0    | 9.7+3.5      | 9.9+3.5       | 10.0+5.3      |
| EER                             |                | W/W       | 2.81         | 2.51         | 2.61          | 2.48          |
| COP                             |                | W/W       | 3.21         | 2.71         | 2.9           | 3.32          |
| Air Flow (H/M/L)                |                | m3/h      | 1100/900     | 1700/1480    | 1700/1480     | 2350/1950     |
| Noise Level                     | Indoor         | dB(A)     | 47/43        | 52/49        | 52/49         | 54/51         |
|                                 | Outdoor        | dB(A)     | 58           | 61           | 62            | 64            |
| Net Dimension                   | Indoor(WxDxH)  | mm        | 500x315x1700 | 550x418x1824 | 550x418x1824  | 600x455x1934  |
|                                 | Outdoor(WxDxH) | mm        | 845x360x607  | 946x410x810  | 900x350x1170  | 900x350x1170  |
| Packing Dimension               | Body(WxDxH)    | mm        | 615x425x1805 | 655x540x1935 | 655x540x1935  | 745x595x2040  |
|                                 | Panel(WxDxH)   | mm        | 965x395x755  | 1090x500x865 | 1032x443x1307 | 1032x443x1307 |
| Net/Gross Weight                | Indoor         | kg        | 38.6/50      | 55.8/70      | 55.8/70       | 67/86         |
|                                 | Outdoor        | kg        | 50/53.3      | 49.2/52.2    | 97/107        | 97/107        |
| Piping size                     | Liquid         | φmm(inch) | 9.52(3/8")   | 12.7(1/2")   | 12.7(1/2")    | 12.7(1/2")    |
|                                 | Gas            | φmm(inch) | 15.9(5/8")   | 19(3/4")     | 19(3/4")      | 19(3/4")      |
| Applicable area                 |                | m2        | 32-47        | 56-82        | 61-90         | 69-102        |
| Loading Capacity(20'/40'/40'HQ) |                | sets      | 36/75/87     | 22/48/56     | 18/40/50      | 17/34/42      |





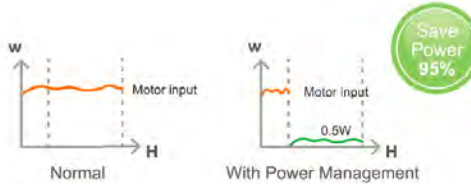
Heat Pump Function

Heat pump system is an excellent alternative for the traditional heating system, as the former can provide more heating capacity and is more efficient. Moreover, thanks to the air circulating fast throughout the room, this heating system guarantees comfort much more quickly.



Power Management

When room temperature reaches setting temperature, power management control system will get unit running into low input standby mode, which cuts 95% power off.



Smart Dehumidifying(Optional)

Automatically control room humidity in a comfortable range 45%-55% according to room temperature, inhibit bacterial growth.



Dryer Mode(Optional)

Intelligent Dryer Mode to dry up clothes quickly.



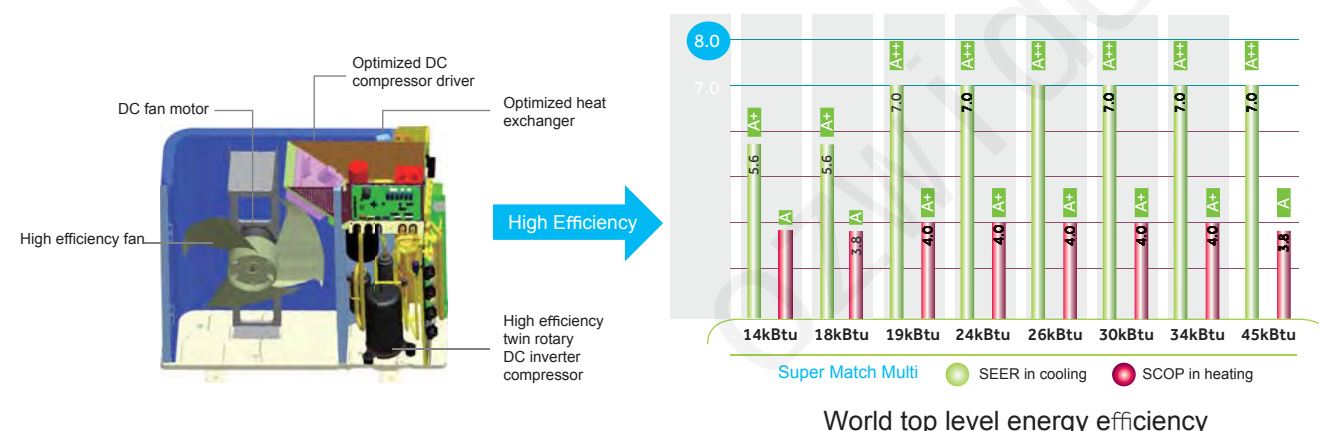
R410a environmental refrigerant 50Hz ON/OFF

| Model                           |         |       | 9000BTU | 9000BTU      | 9000BTU      | 12000BTU     | 12000BTU     |
|---------------------------------|---------|-------|---------|--------------|--------------|--------------|--------------|
| Power supply                    |         |       | V/Hz/Ph | 220-240/50/1 | 220-240/50/1 | 220-240/50/1 | 220-240/50/1 |
| Capacity                        | Cooling | Btu/h | 9000    | 9000         | 9000         | 12000        | 12000        |
|                                 |         | W     | 2600    | 2600         | 2600         | 3500         | 3500         |
|                                 | Heating | Btu/h | -       | -            | 7800         | -            | 10000        |
|                                 |         | W     | -       | -            | 2300         | -            | 2900         |
| Power input                     | Cooling | W     | 1010    | 850          | 850          | 1350         | 1350         |
|                                 | Heating | W     | -       | -            | 756          | -            | 1130         |
| Operating Current               | Cooling | A     | 4.4     | 3.8          | 3.8          | 5.9          | 5.9          |
|                                 | Heating | A     | -       | -            | 3.4          | -            | 5            |
| EER                             |         |       | W/W     | 2.6          | 3.1          | 3.1          | 2.6          |
| Energy Rate                     |         |       |         | A            | A+           | A+           | A            |
| Moisture Removal                |         |       | l/h     | 1.0          | 1.0          | 1.0          | 1.2          |
| Air Flow                        |         |       | m3/h    | 350          | 370          | 370          | 425          |
| Noise Level(High speed)         |         |       | dB(A)   | 65           | 64           | 64           | 65           |
| Net Dimension(WxDxH)            |         |       | mm      | 454x365x700  | 466x397x765  | 466x397x765  | 466x397x765  |
| Packing Dimension(WxDxH)        |         |       | mm      | 489x403x880  | 515x443x880  | 515x443x880  | 515x443x880  |
| Net Weight                      |         |       | kg      | 26.6         | 32           | 32.5         | 34           |
| Gross Weight                    |         |       | kg      | 31.2         | 35.5         | 36           | 37.5         |
| Applicable Area                 |         |       | m2      | 12~18        | 12~18        | 12~18        | 16~23        |
| Loading Capacity(20°/40°/40°HQ) |         |       | pcs     | 132/274/403  | 114/238/356  | 114/238/356  | 114/238/356  |

R410a environmental refrigerant 50Hz ON/OFF

| Model                           |         | N30          | N40          | N50          |
|---------------------------------|---------|--------------|--------------|--------------|
| Moisture Removal 30℃,RH 80%     | l/h     | 30           | 40           | 50           |
| Power supply                    | V/Hz/Ph | 220-240/50/1 | 220-240/50/1 | 220-240/50/1 |
| Pow er input 30℃,RH 80%         | W       | 465          | 560          | 775          |
| Operating Current 30℃,RH 80%    | A       | 2.5          | 2.7          | 3.6          |
| Air Flow                        | m3/h    | 210          | 345          | 345          |
| Water tank volume               | L       | 3            | 6            | 6            |
| Noise Level(High/Low )          | dB(A)   | 54/52        | 52/51        | 52/51        |
| Net Dimension(WxDxH)            | mm      | 386x260x500  | 392x282x616  | 392x282x616  |
| Packing Dimension(WxDxH)        | mm      | 420x297x537  | 427x327x657  | 427x327x657  |
| Net Weight                      | kg      | 15.3         | 18.1         | 19.8         |
| Gross Weight                    | kg      | 16.4         | 19.5         | 21.2         |
| Applicable Area                 | m2      | 58~73        | 80~95        | 100~115      |
| Loading Capacity(20°/40°/40°HQ) | pcs     | 432/884/1085 | 288/588/778  | 288/588/778  |

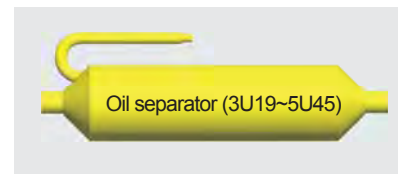
## High Efficiency&Comfortable



## High Reliability

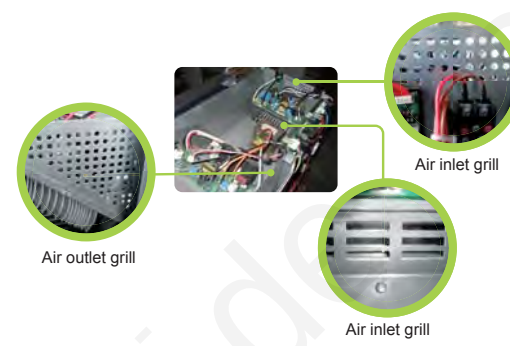
### Oil return

For 1:3 to 1:5 outdoor unit models, Haier multi split outdoor unit system (3U19~5U45) takes oil separator design, compressor oil come back to compressor in time, so compressor running with oil, lower compressor wear possibility, boost system reliability.



### Electrical box ventilation

Electrical box design: reserved air path (1:3~1:5) good for ventilation, working temperature of electric box can be sufficiently reduced, lower electrical component malfunction rate, boost reliability.



### Control

High voltage communication wire guarantee the control not to be interfered by electromagnetic wave, boost control reliability.



## Wider Application

### Wider frequency application

Equipped with various DC components, the new Multi system is applicable both for 50Hz and 60Hz electricity condition.

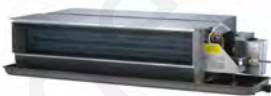


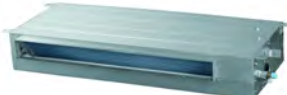
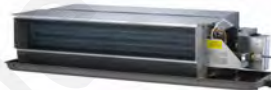
### Wider voltage range

Working voltage: 208V~240V  
The system is more tolerance in unstable voltage conditions.

## Free Match



| Indoor unit series                                                                                              | Controller                                                                          | 7000 Btu/h                                                                           | 9000 Btu/h                                                                            |
|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Aqua series</b><br>         |    |     |    |
| <b>Zircon series</b><br>       |    |     |    |
| <b>N Fseries</b><br>           |    |     |    |
| <b>N Hseries</b><br>           |    |     |    |
| <b>Console series</b><br>      |    |                                                                                      |    |
| <b>Cassette</b><br>          |   |                                                                                      |   |
| <b>Convertible</b><br>       |  |                                                                                      |                                                                                       |
| <b>Slim low ESP duct</b><br> |  |                                                                                      |  |
| <b>Low ESP duct</b><br>      |  |                                                                                      |  |
| <b>Medium ESP duct</b><br>   |  |                                                                                      |                                                                                       |
| Outdoor unit series                                                                                             | 14000 Btu/h - 4.1 kW                                                                | 18000 Btu/h - 5.1 kW                                                                 | 19000 Btu/h - 5.4 kW                                                                  |
|                              |  |  |  |

| 12000 Btu/h                                                                           |  | 18000 Btu/h                                                                           |  | 24000 Btu/h                                                                           |  |                                                                                       |  |                                                                                       |  |
|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|
|    |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |
|    |  |    |  |    |  |                                                                                       |  |                                                                                       |  |
|    |  |    |  |    |  |                                                                                       |  |                                                                                       |  |
|    |  |    |  |    |  |                                                                                       |  |                                                                                       |  |
|    |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |
|   |  |   |  |   |  |                                                                                       |  |                                                                                       |  |
|  |  |  |  |  |  |                                                                                       |  |                                                                                       |  |
|  |  |  |  |  |  |                                                                                       |  |                                                                                       |  |
|  |  |  |  |  |  |                                                                                       |  |                                                                                       |  |
|  |  |  |  |  |  |                                                                                       |  |                                                                                       |  |
| 24000 Btu/h - 6.8 kW                                                                  |  | 26000 Btu/h - 7.6 kW                                                                  |  | 30000 Btu/h - 8.8 kW                                                                  |  | 34000 Btu/h - 10 kW                                                                   |  | 45000 Btu/h - 12.2 kW                                                                 |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |



Light Commercial AC



R410a 50Hz ON/OFF

| Model                               |         |           | 12000BTU     | 18000BTU     | 24000BTU     | 36000BTU     | 48000BTU      | 60000BTU      |
|-------------------------------------|---------|-----------|--------------|--------------|--------------|--------------|---------------|---------------|
| Power supply                        |         | V/Hz/Ph   | 220-240/50/1 | 220-240/50/1 | 220-240/50/1 | 380-415/50/3 | 380-415/50/3  | 380-415/50/3  |
| Capacity                            | Cooling | Btu/h     | 12000        | 18000        | 24000        | 36000        | 48000         | 60000         |
|                                     |         | kW        | 3.2          | 5.3          | 7.1          | 10.5         | 14.0          | 16.0          |
|                                     | Heating | Btu/h     | 13000        | 20000        | 26000        | 40000        | 52000         | 65000         |
|                                     |         | kW        | 4.0          | 6.0          | 7.6          | 12           | 15            | 19            |
| Air Flow (H/M/L)                    |         | m3/h      | 1800         | 2400         | 2700         | 4800         | 6200          | 6500          |
| Noise Level(H/M/L)                  |         | dB(A)     | 55           | 58           | 59           | 60           | 63            | 63            |
| Net Dimension(WxDxH)                |         | mm        | 770x300x555  | 770x300x555  | 845x360x607  | 946x410x810  | 900x350x1170  | 900x350x1170  |
| Packing Dimension(WxDxH)            |         | mm        | 900x345x585  | 900x345x585  | 965x395x755  | 1090x500x865 | 1032x443x1307 | 1032x443x1307 |
| Net/Gross Weight                    | Body    | kg        | 28/30        | 37/39        | 49.2/52.2    | 63/73        | 93.2/105      | 97/108        |
| Piping size                         | Liquid  | φmm(inch) | 6.35(1/4)    | 6.35(1/4)    | 9.52(3/8)    | 9.52(3/8)    | 9.52(3/8)     | 9.52(3/8)     |
|                                     | Gas     | φmm(inch) | 12.7(1/2)    | 12.7(1/2)    | 15.9(5/8)    | 19(3/4)      | 19(3/4)       | 19(3/4)       |
| Max pipe length                     |         | m         | 15           | 25           | 25           | 30           | 50            | 50            |
| Max height difference               |         | m         | 8            | 15           | 15           | 20           | 25            | 25            |
| Loading Capacity<br>(20'/40'/40'HQ) |         | pcs       | 167/343/344  | 167/343/344  | 102/215/216  | 44/96/144    | 27/57/108     | 27/57/108     |

R410a 50Hz DC Inverter

| Model                            |         |           | 18000BTU          | 24000BTU           | 36000BTU           | 48000BTU           | 60000BTU           |
|----------------------------------|---------|-----------|-------------------|--------------------|--------------------|--------------------|--------------------|
| Power supply                     |         | V/Hz/Ph   | 220-240/50/1      | 220-240/50/1       | 380-415/50/3       | 380-415/50/3       | 380-415/50/3       |
| Capacity                         | Cooling | Btu/h     | 18000(6120-19260) | 24000(5400- 27000) | 36000(10800-42120) | 48000(12000-51360) | 55000(19243-58850) |
|                                  |         | kW        | 5.3(1.8-5.6)      | 7.0(1.6-7.9)       | 10.5(3.2-12.3)     | 14.0(3.5-15.1)     | 16.0(5.6-17.2)     |
|                                  | Heating | Btu/h     | 20000(4800-21800) | 26000(5800-29000)  | 40000(12500-46800) | 52000(15000-56680) | 60000(22928-65400) |
|                                  |         | kW        | 6.0(1.4-6.4)      | 7.6(1.7-8.5)       | 11.7(3.7-13.8)     | 15.2(4.4-16.6)     | 17.5(6.7-19.2)     |
| Air Flow (H/M/L)                 |         | m3/h      | 2570              | 2700               | 5200               | 7200               | 7500               |
| Noise Level(H/M/L)               |         | dB(A)     | 54                | 58                 | 61                 | 63                 | 59                 |
| Net Dimension(WxDxH)             |         | mm        | 800x333x554       | 845x360x607        | 946x410x810        | 950x410x1333       | 950x410x1333       |
| Packing Dimension(WxDxH)         |         | mm        | 920x390x615       | 965x395x755        | 1090x500x865       | 1100x510x1488      | 1100x510x1488      |
| Net/Gross Weight                 | Body    | kg        | 37/40             | 52/55              | 78/88              | 102/118            | 107/120            |
| Piping size                      | Liquid  | φmm(inch) | 6.35(1/4)         | 9.52(3/8)          | 9.52(3/8)          | 9.52(3/8)          | 9.52(3/8)          |
|                                  | Gas     | φmm(inch) | 12.7(1/2)         | 15.9(5/8)          | 19(3/4)            | 19(3/4)            | 19(3/4)            |
| Max pipe length                  |         | m         | 15                | 30                 | 50                 | 50                 | 65                 |
| Max height difference            |         | m         | 8                 | 20                 | 25                 | 25                 | 30                 |
| Loading Capacity (20'/40'/40'HQ) |         | pcs       | 108/219/292       | 102/215/216        | 44/96/144          | 22/46/46           | 22/46/46           |

Light Commercial AC



R410a 60Hz ON/OFF

| Model                           |         |           | 24000BTU     | 36000BTU     | 48000BTU     | 60000BTU     |
|---------------------------------|---------|-----------|--------------|--------------|--------------|--------------|
| Power supply                    |         | V/Hz/Ph   | 220-230/60/1 | 220-230/60/1 | 220-230/60/1 | 220-230/60/1 |
| Capacity                        | Cooling | Btu/h     | 24000        | 36000        | 48000        | 60000        |
|                                 |         | kW        | 7.1          | 10.5         | 14.0         | 17.5         |
|                                 | Heating | Btu/h     | /            | /            | /            | /            |
|                                 |         | kW        | /            | /            | /            | /            |
| Air Flow (H/M/L)                |         | m3/h      | 5100         | 5100         | 7400         | 7400         |
| Noise Level(H/M/L)              |         | dB(A)     | 65           | 67           | 68           | 64           |
| Net Dimension(WxDxH)            |         | mm        | 600x600x633  | 600x600x633  | 710x710x759  | 740x740x843  |
| Packing Dimension(WxDxH)        |         | mm        | 628x628x667  | 628x628x667  | 738x738x794  | 768x768x872  |
| Net/Gross Weight                | Body    | kg        | 43/46.5      | 60/63.5      | 75/78.5      | 88.1/92.8    |
| Piping size                     | Liquid  | φmm(inch) | 9.52(3/8)    | 9.52(3/8)    | 9.52(3/8)    | 9.52(3/8)    |
|                                 | Gas     | φmm(inch) | 16.0(5/8)    | 19(3/4)      | 22(7/8)      | 22(7/8)      |
| Max pipe length                 |         | m         | 25           | 30           | 50           | 50           |
| Max height difference           |         | m         | 15           | 20           | 25           | 25           |
| Loading Capacity(20'/40'/40"HQ) |         | unit      | 81/171/228   | 81/171/228   | 42/96/144    | 42/90/134    |

R410a 60Hz ON/OFF

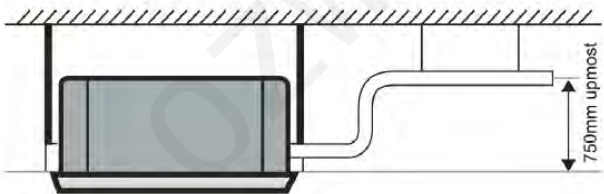
| Model                           |         |           | 36000BTU    | 48000BTU    | 60000BTU    |
|---------------------------------|---------|-----------|-------------|-------------|-------------|
| Power supply                    |         | V/Hz/Ph   | 220/60/3    | 220/60/3    | 220/60/3    |
| Capacity                        | Cooling | Btu/h     | 36000       | 48000       | 60000       |
|                                 |         | kW        | 10.5        | 14.0        | 17.5        |
|                                 | Heating | Btu/h     | /           | /           | /           |
|                                 |         | kW        | /           | /           | /           |
| Air Flow (H/M/L)                |         | m3/h      | 5100        | 7400        | 7400        |
| Noise Level(H/M/L)              |         | dB(A)     | 67          | 68          | 64          |
| Net Dimension(WxDxH)            |         | mm        | 600x600x633 | 710x710x759 | 740x740x843 |
| Packing Dimension(WxDxH)        |         | mm        | 628x628x667 | 738x738x794 | 768x768x872 |
| Net/Gross Weight                | Body    | kg        | 60/63.5     | 75/78.5     | 88.1/92.8   |
| Piping size                     | Liquid  | φmm(inch) | 9.52(3/8)   | 9.52(3/8)   | 9.52(3/8)   |
|                                 | Gas     | φmm(inch) | 19(3/4)     | 22(7/8)     | 22(7/8)     |
| Max pipe length                 |         | m         | 30          | 50          | 50          |
| Max height difference           |         | m         | 20          | 25          | 25          |
| Loading Capacity(20'/40'/40'HQ) |         | unit      | 81/171/228  | 42/96/144   | 42/90/134   |



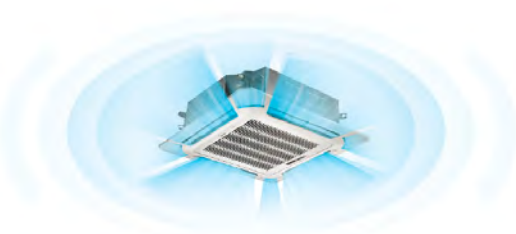


Features:

The built-in drain pump can lift the condensing water to 750mm



360° Air Flow Panel



Lifting Easy-clean Panel



Wired controller



**R410a** environmental refrigerant **50Hz ON/OFF**

| Model                           |              |           | 18000BTU     | 24000BTU      | 36000BTU       | 48000BTU       | 60000BTU       |
|---------------------------------|--------------|-----------|--------------|---------------|----------------|----------------|----------------|
| Power supply                    |              | V/Hz/Ph   | 220-240/50/1 | 220-240/50/1  | 380-415/50/3   | 380-415/50/3   | 380-415/50/3   |
| Capacity                        | Cooling      | Btu/h     | 18000        | 24000         | 36000          | 48000          | 55000          |
|                                 |              | kW        | 5.3          | 7.1           | 10.5           | 14.0           | 16.1           |
|                                 | Heating      | Btu/h     | 19000        | 26000         | 40000          | 52000          | 58000          |
|                                 |              | kW        | 5.6          | 7.6           | 12.0           | 15.2           | 17.0           |
| Power input                     | Cooling      | W         | 2100         | 2500          | 4040           | 5605           | 6415           |
|                                 | Heating      | W         | 1735         | 2370          | 3895           | 5415           | 6050           |
| EER                             |              | W/W       | 2.51         | 2.81          | 2.61           | 2.51           | 2.51           |
| COP                             |              | W/W       | 3.21         | 3.21          | 3.01           | 2.81           | 2.81           |
| Air Flow (H/M/L)                |              | m3/h      | 900/700/550  | 1200/1050/900 | 1800/1600/1400 | 1900/1600/1400 | 2000/1700/1500 |
| Noise Level(H/M/L)              |              | dB(A)     | 40/37/34     | 48/46/41      | 51/47/43       | 53/48/44       | 53/48/44       |
| Net Dimension                   | Body(WxDxH)  | mm        | 840x840x205  | 840x840x205   | 840x840x245    | 840x840x245    | 840x840x287    |
|                                 | Panel(WxDxH) | mm        | 950x950x55   | 950x950x55    | 950x950x55     | 950x950x55     | 950x950x55     |
| Packing Dimension               | Body(WxDxH)  | mm        | 900x900x225  | 900x900x225   | 900x900x265    | 900x900x265    | 900x900x292    |
|                                 | Panel(WxDxH) | mm        | 1035x1035x90 | 1035x1035x90  | 1035x1035x90   | 1035x1035x90   | 1035x1035x90   |
| Net/Gross Weight                | Body         | kg        | 21.5/25      | 23/27         | 25/28.5        | 27/32          | 29/34          |
|                                 | Panel        | kg        | 5/8          | 5/8           | 5/8            | 5/8            | 5/8            |
| Piping size                     | Liquid       | φmm(inch) | 6.35(1/4)    | 9.52(3/8)     | 9.52(3/8)      | 9.52(3/8)      | 9.52(3/8)      |
|                                 | Gas          | φmm(inch) | 12.7(1/2)    | 15.9(5/8)     | 19(3/4)        | 19(3/4)        | 19(3/4)        |
|                                 | Drainage     | OD mm     | 32           | 32            | 32             | 32             | 32             |
| Applicable area                 |              | m2        | 24-35        | 32-47         | 48-70          | 64-94          | 73-107         |
| Loading Capacity(20°/40°/40°HQ) |              | sets      | 62/130/140   | 50/102/118    | 36/74/85       | 30/63/74       | 30/62/73       |

**R410a** environmental refrigerant **50Hz DC Inverter**

| Model                           |              |           | 24000BTU          | 36000BTU           | 48000BTU           | 60000BTU           |
|---------------------------------|--------------|-----------|-------------------|--------------------|--------------------|--------------------|
| Power supply                    |              | V/Hz/Ph   | 220-240/50/1      | 380-415/50/3       | 380-415/50/3       | 380-415/50/3       |
| Capacity                        | Cooling      | Btu/h     | 24000(5400-27000) | 36000(10800-42120) | 48000(12000-51360) | 55000(19243-58850) |
|                                 |              | kW        | 7.0(1.6-7.9)      | 10.5(3.2-12.3)     | 14.0(3.5-15.1)     | 16.0(5.6-17.2)     |
|                                 | Heating      | Btu/h     | 26000(5800-29000) | 40000(12500-46800) | 52000(15000-56680) | 60000(22928-65400) |
|                                 |              | kW        | 7.6(1.7-8.5)      | 11.7(3.7-13.8)     | 15.2(4.4-16.6)     | 17.5(6.7-19.2)     |
| Power input                     | Cooling      | W         | 2160(650-2800)    | 3240(970-4210)     | 4320(1300-5610)    | 4990(2070-6220)    |
|                                 | Heating      | W         | 2060(620-2680)    | 3230(940-4080)     | 4130(1240-5380)    | 4850(2200-6590)    |
| EER                             |              | W/W       | 3.24              | 3.24               | 3.24               | 3.21               |
| COP                             |              | W/W       | 3.69              | 3.63               | 3.68               | 3.61               |
| Air Flow (H/M/L)                |              | m3/h      | 1250/1050/900     | 1800/1600/1400     | 1900/1600/1400     | 2000/1700/1500     |
| Noise Level(H/M/L)              |              | dB(A)     | 51/45/38          | 52/48/45           | 52/49/46           | 53/47/44           |
| Net Dimension                   | Body(WxDxH)  | mm        | 840x840x205       | 840x840x245        | 840x840x245        | 840x840x287        |
|                                 | Panel(WxDxH) | mm        | 950x950x55        | 950x950x55         | 950x950x55         | 950x950x55         |
| Packing Dimension               | Body(WxDxH)  | mm        | 900x900x225       | 900x900x265        | 900x900x265        | 900x900x292        |
|                                 | Panel(WxDxH) | mm        | 1035x1035x90      | 1035x1035x90       | 1035x1035x90       | 1035x1035x90       |
| Net/Gross Weight                | Body         | kg        | 21.5/25           | 24.5/28            | 27/30.5            | 31/34              |
|                                 | Panel        | kg        | 5/8               | 5/8                | 5/8                | 5/8                |
| Piping size                     | Liquid       | φmm(inch) | 9.52(3/8)         | 9.52(3/8)          | 9.52(3/8)          | 9.52(3/8)          |
|                                 | Gas          | φmm(inch) | 15.9(5/8)         | 19(3/4)            | 19(3/4)            | 19(3/4)            |
|                                 | Drainage     | OD mm     | 32                | 32                 | 32                 | 32                 |
| Applicable area                 |              | m2        | 32-47             | 48-70              | 64-94              | 73-107             |
| Loading Capacity(20°/40°/40°HQ) |              | sets      | 50/102/118        | 36/74/85           | 30/63/74           | 30/62/73           |



Easy maintenance

More than 60% parts and assemblies(such as fan wheel,plastic cases,metal parts) are universal for 3 different bodies, which makes the production and maintenance much easier.



Fresh Air

Air outside can be lead into the room via a connection pipe, which keeps the indoor air fresh and healthy.



3D Air Flow

The unit has auto horizontal swing and auto vertical swing function, which supplies more even and comfortable air flow.



Wired controller

Compared with remote controller,wired controller can be fixed on the wall and avoid mislaying. It is mainly used for commercialzone and makes the air conditioner control more convenient.



R410a environmental refrigerant 50Hz ON/OFF

| Model                           |          |           | 18000BTU      | 24000BTU       | 36000BTU       | 48000BTU       | 60000BTU       |
|---------------------------------|----------|-----------|---------------|----------------|----------------|----------------|----------------|
| Pow er supply                   |          | V/Hz/Ph   | 220-240/50/1  | 220-240/50/1   | 380-415/50/3   | 380-415/50/3   | 380-415/50/3   |
| Capacity                        | Cooling  | Btu/h     | 18000         | 24000          | 36000          | 48000          | 55000          |
|                                 |          | kW        | 5.3           | 7.1            | 10.5           | 14.0           | 16.1           |
|                                 | Heating  | Btu/h     | 20000         | 26000          | 40000          | 52000          | 65000          |
|                                 |          | kW        | 5.9           | 7.6            | 11.7           | 15.2           | 19.1           |
| Pow er input                    | Cooling  | W         | 1710          | 2405           | 3960           | 5360           | 6370           |
|                                 | Heating  | W         | 1745          | 2390           | 3835           | 5015           | 6145           |
| EER                             |          | W/W       | 3.1           | 2.95           | 2.65           | 2.61           | 2.51           |
| COP                             |          | W/W       | 3.38          | 3.18           | 3.05           | 3.03           | 3.01           |
| Air Flow (H/M/L)                |          | m3/h      | 1300/1050/900 | 1400/1200/1000 | 1750/1400/1250 | 1750/1400/1250 | 2300/1800/1600 |
| Noise Level(H/M/L)              |          | dB(A)     | 52/46/41      | 53/48/42       | 53/48/44       | 53/48/44       | 55/49/46       |
| Net Dimension(WxDxH)            |          | mm        | 1068x675x235  | 1068x675x235   | 1285x675x235   | 1285x675x235   | 1650x675x235   |
| Packing Dimension(WxDxH)        |          | mm        | 1145x755x313  | 1145x755x313   | 1360x755x313   | 1360x755x313   | 1725x755x313   |
| Net/Gross Weight                | Body     | kg        | 24/29         | 24/29          | 29/36          | 31/38          | 39/45          |
| Piping size                     | Liquid   | φmm(inch) | 6.35(1/4)     | 9.52(3/8)      | 9.52(3/8)      | 9.52(3/8)      | 9.52(3/8)      |
|                                 | Gas      | φmm(inch) | 12.7(1/2)     | 15.9(5/8)      | 19(3/4)        | 19(3/4)        | 19(3/4)        |
|                                 | Drainage | OD mm     | 25            | 25             | 25             | 25             | 25             |
| Applicable area                 |          | m2        | 24-35         | 32-47          | 48-70          | 64-94          | 73-107         |
| Loading Capacity(20'/40'/40'HQ) |          | sets      | 62/132/148    | 65/132/148     | 52/106/120     | 30/63/74       | 27/57/67       |

R410a environmental refrigerant 50Hz DC Inverter

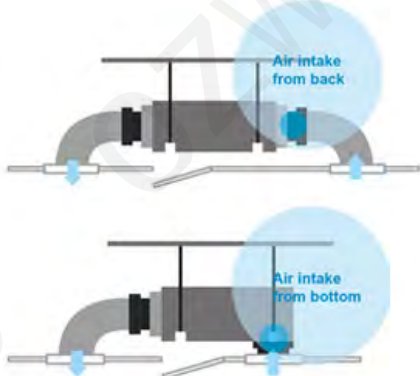
| Model                           |          |           | 18000BTU          | 24000BTU           | 36000BTU           | 48000BTU           | 60000BTU           |
|---------------------------------|----------|-----------|-------------------|--------------------|--------------------|--------------------|--------------------|
| Pow er supply                   |          | V/Hz/Ph   | 220-240/50/1      | 220-240/50/1       | 380-415/50/3       | 380-415/50/3       | 380-415/50/3       |
| Capacity                        | Cooling  | Btu/h     | 18000(5500-20000) | 24000(7000-27000)  | 36000(10800-42120) | 48000(12000-51360) | 55000(19243-58850) |
|                                 |          | kW        | 5.3(1.6-5.9)      | 7.1(2.1-7.9)       | 10.5(3.2-12.3)     | 14.0(3.5-15.1)     | 16.0(5.6-17.2)     |
|                                 | Heating  | Btu/h     | 20000(5000-21000) | 25000( 7500-30000) | 40000(12500-46800) | 52000(15000-56680) | 60000(22928-65400) |
|                                 |          | kW        | 5.9(1.5-6.1)      | 7.3(2.2-8.8)       | 11.7(3.7-13.8)     | 15.2(4.4-16.6)     | 17.5(6.7-19.2)     |
| Power input                     | Cooling  | W         | 1620(550-2500)    | 2180(1000-2800)    | 3200(2250-5550)    | 4300(2450-6100)    | 4300(3500-7500)    |
|                                 | Heating  | W         | 1590(700-2350)    | 1980(1050-2600)    | 3160(2350-5200)    | 4080(2300-5550)    | 4830(1600-6250)    |
| EER                             |          | W/W       | 3.27              | 3.26               | 3.28               | 3.25               | 3.23               |
| COP                             |          | W/W       | 3.72              | 3.69               | 3.70               | 3.73               | 3.62               |
| Air Flow (H/M/L)                |          | m3/h      | 1300/1050/900     | 1400/1200/1000     | 1800/1600/1350     | 2300/1900/1700     | 2300/1900/1700     |
| Noise Level(H/M/L)              |          | dB(A)     | 52/46/41          | 53/48/41           | 54/49/45           | 56/52/49           | 56/52/49           |
| Net Dimension(WxDxH)            |          | mm        | 1068x675x235      | 1068x675x235       | 1285x675x235       | 1650x675x235       | 1650x675x235       |
| Packing Dimension(WxDxH)        |          | mm        | 1145x755x313      | 1145x755x313       | 1360x755x313       | 1725x755x313       | 1725x755x313       |
| Net/Gross Weight                | Body     | kg        | 24/29             | 25/30              | 30/35              | 38/44              | 38/44              |
| Piping size                     | Liquid   | φmm(inch) | 6.35(1/4)         | 9.52(3/8)          | 9.52(3/8)          | 9.52(3/8)          | 9.52(3/8)          |
|                                 | Gas      | φmm(inch) | 12.7(1/2)         | 15.9(5/8)          | 19(3/4)            | 19(3/4)            | 19(3/4)            |
|                                 | Drainage | OD mm     | 25                | 25                 | 25                 | 25                 | 25                 |
| Applicable area                 |          | m2        | 24-35             | 32-47              | 48-70              | 64-94              | 73-107             |
| Loading Capacity(20'/40'/40"HQ) |          | sets      | 57/120/132        | 52/104/120         | 36/72/82           | 20/44/46           | 20/44/46           |





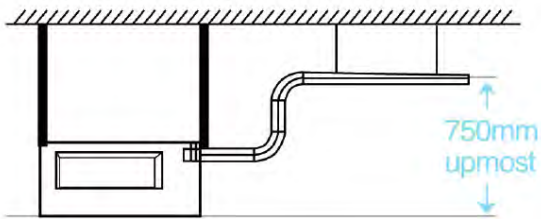
Flexible Air Intake Ways

Air inlet from back standard and from bottom optional. The size of the plate from bottom and flange from back is the same, it's easy for installer to change the air inlet from back to bottom.



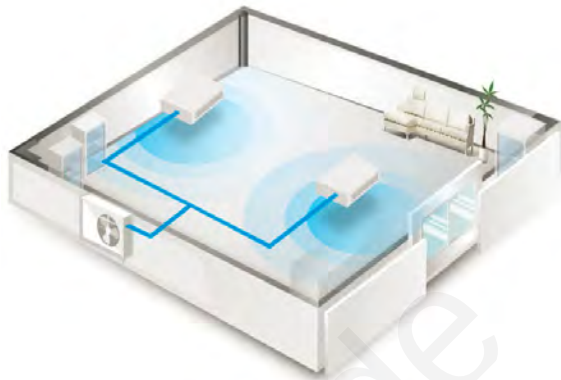
Built-in Drain pump(Optional)

The Drain punm can lift the condensing water up to 750mm.



Twin Combination

The units can be installed as twin systems: one outdoor unit can be connected with two same indoor units. The indoor units can be combined in any of the different available ratings.



Fresh Air

Fresh Air Hole as standard.It is easy to connect with air from outside and brings fresh and comfortable feeling.



R410a 50Hz ON/OFF

| Model                           |          |           | 12000BTU     | 18000BTU     | 24000BTU       | 36000BTU       | 48000BTU       | 60000BTU       |
|---------------------------------|----------|-----------|--------------|--------------|----------------|----------------|----------------|----------------|
| Power supply                    |          | V/Hz/Ph   | 220-240/50/1 | 220-240/50/1 | 220-240/50/1   | 380-415/50/3   | 380-415/50/3   | 380-415/50/3   |
| Capacity                        | Cooling  | Btu/h     | 12000        | 18000        | 24000          | 36000          | 48000          | 55000          |
|                                 |          | kW        | 3.2          | 5.3          | 7.1            | 10.5           | 14             | 16             |
|                                 | Heating  | Btu/h     | 13000        | 20000        | 26000          | 40000          | 52000          | 60000          |
|                                 |          | kW        | 4            | 6            | 7.6            | 12             | 15.4           | 17.5           |
| Power input                     | Cooling  | W         | 1060         | 1755         | 2415           | 3737           | 5109           | 5900           |
|                                 | Heating  | W         | 1212         | 1875         | 2420           | 4270           | 5500           | 6300           |
| EER                             |          | W/W       | 3.02         | 3.02         | 2.94           | 2.81           | 2.74           | 2.73           |
| COP                             |          | W/W       | 3.3          | 3.2          | 3.14           | 2.81           | 2.8            | 2.79           |
| Air Flow (H/M/L)                |          | m3/h      | 800/610/520  | 1170/770/650 | 1400/1100/1000 | 2270/1890/1650 | 3010/2410/1940 | 3150/2510/1990 |
| Static pressure                 |          | Pa        | 40           | 70           | 70             | 80             | 100            | 100            |
| Noise Level(H/M/L)              |          | dB(A)     | 43/37/31     | 44/37/33     | 44/37/34       | 48/40/37       | 50/45/40       | 50/45/40       |
| Net Dimension(WxDxH)            |          | mm        | 700x635x210  | 920x635x210  | 920x635x270    | 1140x775x270   | 1200x865x300   | 1200x865x300   |
| Packing Dimension(WxDxH)        |          | mm        | 915x655x290  | 1135x655x290 | 1135x655x350   | 1355x795x350   | 1385x920x373   | 1385x920x373   |
| Net/Gross Weight                | Body     | kg        | 20/25        | 24/28        | 26.5/32        | 36.5/44        | 44.5/53        | 47/55          |
|                                 | Liquid   | φmm(inch) | 6.35(1/4)    | 6.35(1/4)    | 9.52(3/8)      | 9.52(3/8)      | 9.52(3/8)      | 9.52(3/8)      |
| Piping size                     | Gas      | φmm(inch) | 12.7(1/2)    | 12.7(1/2)    | 15.9(5/8)      | 19(3/4)        | 19(3/4)        | 19(3/4)        |
|                                 | Drainage | OD mm     | 25           | 25           | 25             | 25             | 25             | 25             |
| Applicable area                 |          | m2        | 16-23        | 24-35        | 32-47          | 48-70          | 64-94          | 73-107         |
| Loading Capacity(20'/40'/40'HQ) |          | sets      | 85/170/188   | 74/150/165   | 52/108/120     | 30/70/86       | 17/41/59       | 17/41/59       |

R410a 50Hz DC Inverter

| Model                           |          |           | 18000BTU          | 24000BTU           | 36000BTU           | 48000BTU           | 60000BTU           |
|---------------------------------|----------|-----------|-------------------|--------------------|--------------------|--------------------|--------------------|
| Power supply                    |          | V/Hz/Ph   | 220-240/50/1      | 220-240/50/1       | 380-415/50/3       | 380-415/50/3       | 380-415/50/3       |
| Capacity                        | Cooling  | Btu/h     | 18000(7233-21700) | 24000(9519-28524)  | 36000(10800-42120) | 48000(12000-51360) | 55000(19243-58850) |
|                                 |          | kW        | 5.3(3.12-6.36)    | 7.1(2.79-8.36)     | 10.5(3.2-12.3)     | 14.0(3.5-15.1)     | 16.0(5.6-17.2)     |
|                                 | Heating  | Btu/h     | 19000(8188-24532) | 26000(10952-32890) | 40000(12500-46800) | 52000(15000-56680) | 60000(22928-65400) |
|                                 |          | kW        | 5.6(2.4-7.19)     | 7.6(3.21-9.64)     | 11.7(3.7-13.8)     | 15.2(4.4-16.6)     | 17.5(6.7-19.2)     |
| Power input                     | Cooling  | W         | 1620(760-2280)    | 2190(1000-3010)    | 3250(1450-4390)    | 4350(1840-5530)    | 4990(2070-6220)    |
|                                 | Heating  | W         | 1510(780-2330)    | 2090(1040-3130)    | 3310(1620-4870)    | 4160(1900-5710)    | 4870(2200-6590)    |
| EER                             |          | W/W       | 3.26              | 3.24               | 3.23               | 3.22               | 3.21               |
| COP                             |          | W/W       | 3.69              | 3.64               | 3.63               | 3.61               | 3.61               |
| Air Flow (H/M/L)                |          | m3/h      | 1170/770/650      | 1400/1100/1000     | 2270/1890/1650     | 3010/2410/1940     | 3150/2510/1990     |
| Static pressure                 |          | Pa        | 70                | 70                 | 80                 | 100                | 100                |
| Noise Level(H/M/L)              |          | dB(A)     | 42/36/30          | 45/43/41           | 50/44/37           | 50/44/40           | 50/45/40           |
| Net Dimension(WxDxH)            |          | mm        | 920x635x210       | 920x635x270        | 1140x775x270       | 1200x865x300       | 1200x865x300       |
| Packing Dimension(WxDxH)        |          | mm        | 1135x655x290      | 1135x655x350       | 1355x795x350       | 1385x920x373       | 1385x920x373       |
| Net/Gross Weight                | Body     | kg        | 23/29             | 28/31.5            | 39/46              | 45/54.5            | 45/54.5            |
|                                 | Liquid   | φmm(inch) | 6.35(1/4)         | 9.52(3/8)          | 9.52(3/8)          | 9.52(3/8)          | 9.52(3/8)          |
| Piping size                     | Gas      | φmm(inch) | 12.7(1/2)         | 15.9(5/8)          | 19(3/4)            | 19(3/4)            | 19(3/4)            |
|                                 | Drainage | OD mm     | 25                | 25                 | 25                 | 25                 | 25                 |
| Applicable area                 |          | m2        | 24-35             | 32-47              | 48-70              | 64-94              | 73-107             |
| Loading Capacity(20'/40'/40'HQ) |          | sets      | 62/135/150        | 52/106/123         | 30/70/86           | 18/40/46           | 18/40/46           |



**R410a** environmental refrigerant  
**50Hz ON/OFF**

| Model                           |          |           | 24000BTU       | 36000BTU       | 48000BTU       | 60000BTU       |
|---------------------------------|----------|-----------|----------------|----------------|----------------|----------------|
| Power supply                    |          | V/Hz/Ph   | 220-240/50/1   | 220-240/50/1   | 380-415/50/3   | 380-415/50/3   |
| Capacity                        | Cooling  | Btu/h     | 24000          | 36000          | 48000          | 55000          |
|                                 |          | kW        | 7.0            | 10.6           | 14.1           | 16.1           |
|                                 | Heating  | Btu/h     | 26000          | 40000          | 52000          | 60000          |
|                                 |          | kW        | 7.6            | 11.7           | 15.2           | 17.6           |
| Power input                     | Cooling  | W         | 2494           | 3966           | 5410           | 6150           |
|                                 | Heating  | W         | 2280           | 3550           | 4290           | 5440           |
| EER                             |          | W/W       | 2.82           | 2.61           | 2.60           | 2.62           |
| COP                             |          | W/W       | 3.34           | 3.03           | 3.55           | 3.23           |
| Air Flow (H/M/L)                |          | m3/h      | 1450/1200/1000 | 2200/2050/1700 | 3100/2800/2500 | 3100/2800/2500 |
| Static pressure                 |          | Pa        | 90             | 150            | 160            | 160            |
| Noise Level(H/M/L)              |          | dB(A)     | 48/44/39       | 53/50/47       | 53/51/48       | 53/51/48       |
| Net Dimension(WxDxH)            |          | mm        | 900x450x270    | 1110x450x270   | 1200x550x380   | 1200x550x380   |
| Packing Dimension(WxDxH)        |          | mm        | 1130x535x340   | 1325x535x320   | 1475x655x450   | 1475x655x450   |
| Net/Gross Weight                | Body     | kg        | 25/29.5        | 31.3/36        | 46/52.3        | 46/52.3        |
| Piping size                     | Liquid   | φmm(inch) | 9.52(3/8)      | 9.52(3/8)      | 9.52(3/8)      | 9.52(3/8)      |
|                                 | Gas      | φmm(inch) | 15.9(5/8)      | 19(3/4)        | 19(3/4)        | 19(3/4)        |
|                                 | Drainage | OD mm     | 25             | 25             | 25             | 25             |
| Applicable area                 |          | m2        | 32-47          | 48-70          | 64-94          | 73-107         |
| Loading Capacity(20°/40°/40°HQ) |          | sets      | 56/120/135     | 40/84/96       | 24/52/62       | 24/52/62       |

**R22** environmental refrigerant  
**R410a** environmental refrigerant  
**SEER 14 / SEER16 / SEER 18**

| Model                           |          |           | 24000BTU     | 36000BTU     | 48000BTU     | 60000BTU     |
|---------------------------------|----------|-----------|--------------|--------------|--------------|--------------|
| Power supply                    |          | V/Hz/Ph   | 220-230/60/1 | 220-230/60/1 | 220-230/60/1 | 220-230/60/1 |
| Capacity                        | Cooling  | Btu/h     | 24000        | 36000        | 48000        | 60000        |
|                                 |          | kW        | 7.1          | 10.5         | 14.0         | 17.5         |
|                                 | Heating  | Btu/h     | /            | /            | /            | /            |
|                                 |          | kW        | /            | /            | /            | /            |
| Power input                     | Cooling  | W         | 2705         | 4058         | 5411         | 6763         |
|                                 | Heating  | W         | /            | /            | /            | /            |
| Max curent                      | Cooling  | A         | 18           | 28           | 38           | 45           |
|                                 | Heating  | A         | /            | /            | /            | /            |
| EER                             |          | W/W       | 2.6          | 2.6          | 2.6          | 2.6          |
| COP                             |          | W/W       | /            | /            | /            | /            |
| Static pressure                 |          | Pa        | 0-140        | 0-140        | 0-180        | 0-180        |
| Air Flow (H/M/L)                |          | m3/h      | 1450         | 1800         | 2400         | 2406/2026    |
| Noise Level(H/M/L)              |          | dB(A)     | 49           | 52           | 52           | 58.5         |
| Net Dimension(WxDxH)            |          | mm        | 460x520x774  | 460x520x774  | 500x550x970  | 500x550x970  |
| Packing Dimension(WxDxH)        |          | mm        | 520x565x835  | 520x565x835  | 560x595x1030 | 560x595x1030 |
| Net/Gross Weight                | Body     | kg        | 36/38        | 39/42        | 44.5/49      | 50.6/55      |
| Piping size                     | Liquid   | φmm(inch) | 9.52(3/8)    | 9.52(3/8)    | 9.52(3/8)    | 9.52(3/8)    |
|                                 | Gas      | φmm(inch) | 16.0(5/8)    | 19(3/4)      | 19(3/4)      | 22(7/8)      |
|                                 | Drainage | OD mm     | RC3/4"       | RC3/4"       | RC3/4"       | RC3/4"       |
| Loading Capacity(20°/40°/40°HQ) |          | sets      | 88/184/275   | 88/184/275   | 80/164/164   | 80/164/164   |



Wide range of outdoor units

The outdoor units capacity range from 8kW to 18kW which is ideal for small offices, villas, apartment and shops, making it perfect for commercial and residential application.

8/10.5kW



12/14/16/18kW



Flexible indoor units connection

Mini VRF with intelligent control gives you independent zoning control with maximum flexibility. A single outdoor unit supports up to nine indoor units, freeing up considerable space outside. Use your backyard more wisely with much more space available created by less number of outdoor units.

- Max. 9 indoor units for a 18kW outdoor unit installation
- Max. 7 indoor units for a 16kW outdoor unit installation
- Max. 6 indoor units for a 14kW outdoor unit installation
- Max. 6 indoor units for a 12kW outdoor unit installation
- Max. 5 indoor units for a 10.5kW outdoor unit installation
- Max. 4 indoor units for a 8kW outdoor unit installation

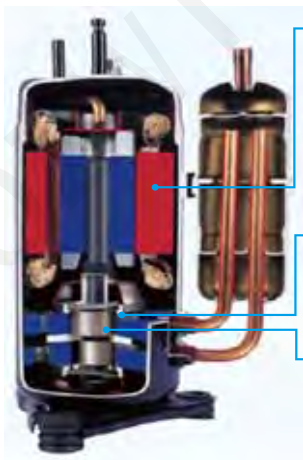


High COP and EER values



Full DC inverter technology

At the heart of our system is a highly intelligent inverter driven compressor. This advanced technology enables the output of the outdoor unit to be modulated by the cooling or heating demands of the zone that it controls. This advanced system ensures precise temperature regulation and highly efficient energy usage, making a significant contribution to the limiting the impact on the environment.



Compressor (Twin Rotary) structure

Highly Efficient DC Motor:

- Creative motor core design
- High density neodymium magnet
- Concentrated type stator
- Wider operating frequency range

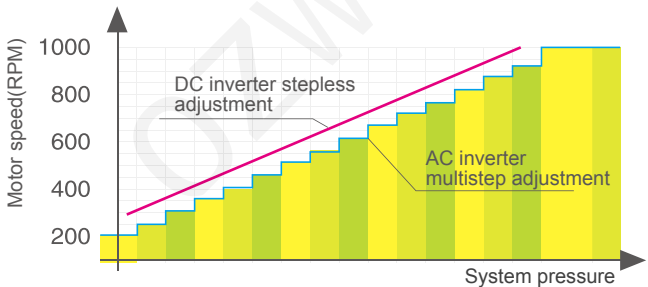
Better balance and Extremely Low Vibration:

- Twin eccentric cams
- 2 balance weights

Highly Stable Moving Parts:

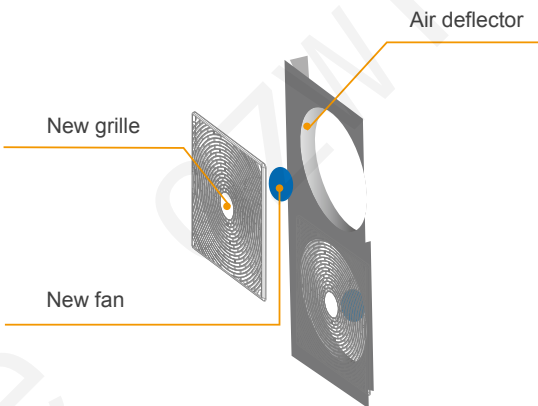
- Optimal material matching rollers and vanes
- Optimize compressor drive technology
- Highly robust bearings
- Compact structure

High efficiency DC fan motor saved power up to 50%.

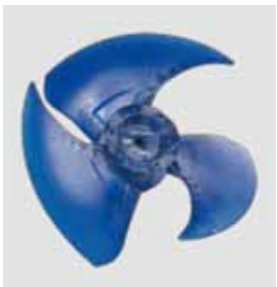


Noise reducing design

Optimally designed fan shape and air discharge grille increases air volume and reduces running noise.



Newly Designed Fan Guard



Powerful Large Propeller

Wide range of outdoor units

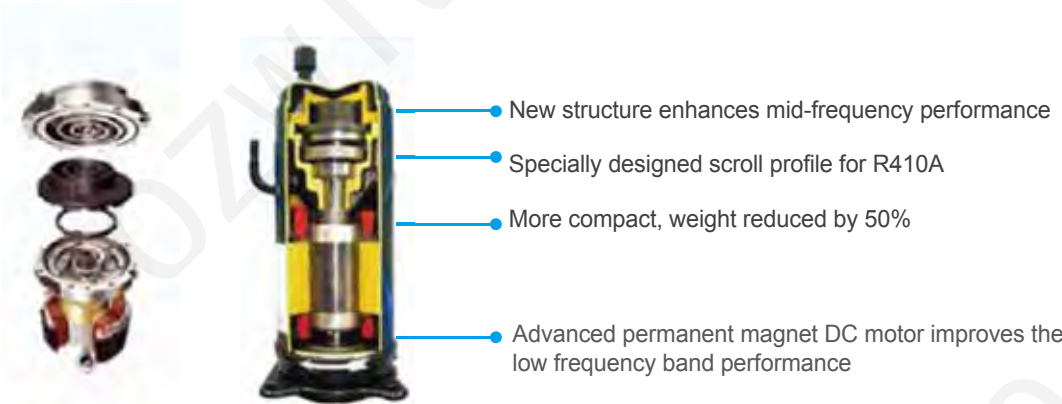
The outdoor units capacity range from 8HP up to 64HP in 2HP increment. Maximum 64 indoor units with capacity up to 130% of total outdoor units can be connected in one refrigeration system.



All DC inverter technology

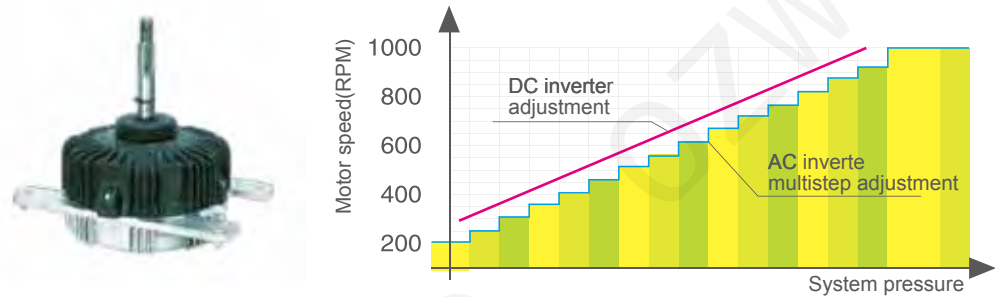
All DC inverter compressors make the capacity output better distributed, and always work at 60-140Hz which is the most efficient range. It makes the efficiency more than 30% higher than the normal.

All DC Inverter Compressors



All DC Fan Motors

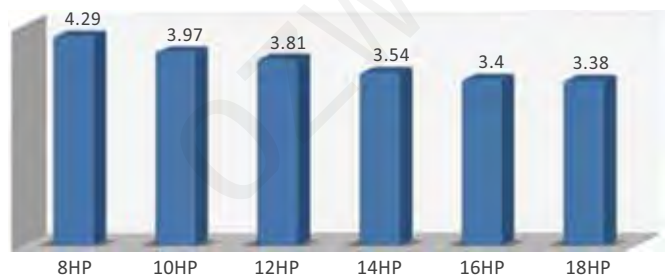
According to the running load and system pressure, the system controls the speed of DC fan to achieve the minimum energy consumption and best performance.



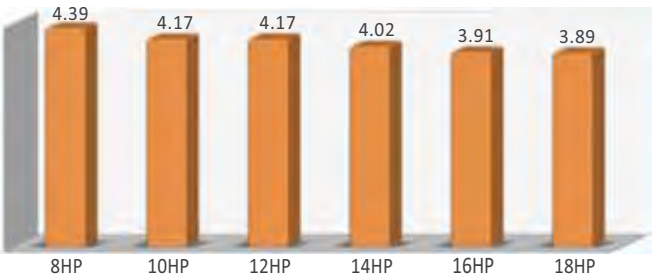
High COP/EER values

The cooling EER up to 4.29 and the heating COP up to 4.39 in the 8HP category.

EER

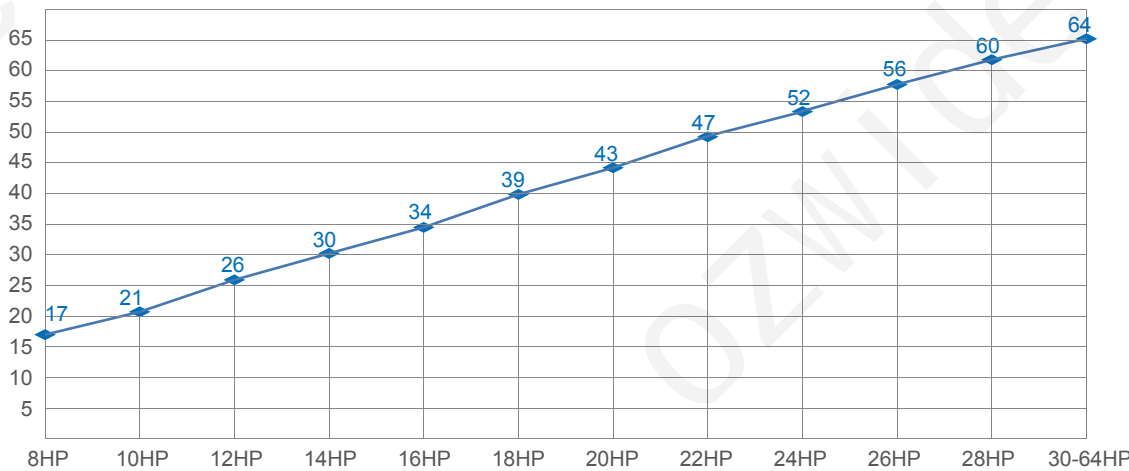


COP

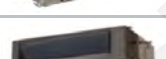


Large connectable indoor units quantity

The large quantity of connectable units is suitable for large buildings and projects.





| Type                          | kW                                                                                  | 1.5 | 1.8 | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 | 8.0 |
|-------------------------------|-------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| One-way Cassette              |    |     | ☾   | ☾   | ☾   | ☾   |     |     |     |     |
|                               |    |     |     |     |     |     | ☾   | ☾   |     |     |
| Two-way Cassette              |    |     |     | ☾   | ☾   | ☾   | ☾   | ☾   | ☾   |     |
| Compact 4-way Cassette        |    | ☾   |     | ☾   | ☾   | ☾   | ☾   |     |     |     |
| Four-way Cassette             |    |     |     | ☾   | ☾   | ☾   | ☾   | ☾   | ☾   | ☾   |
| Low Static Pressure Duct      |    |     | ☾   | ☾   | ☾   | ☾   | ☾   | ☾   | ☾   |     |
| Concealed Duct Unit (A5 Type) |    | ☾   |     | ☾   | ☾   | ☾   | ☾   | ☾   | ☾   |     |
|                               |    |     |     |     |     |     |     |     |     | ☾   |
| High Static Pressure Duct     |    |     |     |     |     |     |     |     | ☾   | ☾   |
|                               |  |     |     |     |     |     |     |     |     |     |
|                               |  |     |     |     |     |     |     |     |     |     |
|                               |  |     |     |     |     |     |     |     |     |     |
|                               |  |     |     |     |     |     |     |     |     |     |
| Ceiling & Floor               |  |     |     |     |     | ☾   | ☾   | ☾   | ☾   | ☾   |
| Wall-mounted                  |  | ☾   |     | ☾   | ☾   | ☾   | ☾   | ☾   |     |     |
|                               |  |     |     | ☾   | ☾   | ☾   | ☾   | ☾   |     |     |
|                               |  |     |     |     |     |     |     |     | ☾   | ☾   |
| Floor Standing                |  |     |     | ☾   | ☾   | ☾   | ☾   | ☾   | ☾   | ☾   |
| Console                       |  |     |     | ☾   | ☾   | ☾   | ☾   |     |     |     |
| Fresh Air Processing Unit     |  |     |     |     |     |     |     |     |     |     |
|                               |  |     |     |     |     |     |     |     |     |     |

| 9.0 | 10.0 | 11.2 | 12.5 | 14.0 | 16.0 | 20.0 | 25.0 | 28.0 | 40.0 | 45.0 | 56.0 |
|-----|------|------|------|------|------|------|------|------|------|------|------|
|     |      |      |      |      |      |      |      |      |      |      |      |
|     |      |      |      |      |      |      |      |      |      |      |      |
|     |      |      |      |      |      |      |      |      |      |      |      |
|     |      |      |      |      |      |      |      |      |      |      |      |
| ☾   | ☾    | ☾    |      | ☾    |      |      |      |      |      |      |      |
|     |      |      |      |      |      |      |      |      |      |      |      |
|     |      |      |      |      |      |      |      |      |      |      |      |
| ☾   |      | ☾    |      | ☾    |      |      |      |      |      |      |      |
| ☾   |      | ☾    |      |      |      |      |      |      |      |      |      |
|     |      |      |      | ☾    | ☾    |      |      |      |      |      |      |
|     |      |      |      |      |      | ☾    | ☾    | ☾    |      |      |      |
|     |      |      |      |      |      |      |      |      | ☾    | ☾    | ☾    |
| ☾   |      | ☾    |      | ☾    | ☾    |      |      |      |      |      |      |
|     |      |      |      |      |      |      |      |      |      |      |      |
|     |      |      |      |      |      |      |      |      |      |      |      |
|     |      |      |      |      |      |      |      |      |      |      |      |
|     |      |      |      |      |      |      |      |      |      |      |      |
|     |      |      | ☾    | ☾    |      |      |      |      |      |      |      |
|     |      |      |      |      |      | ☾    | ☾    | ☾    |      |      |      |



R410a Floor Standing AC technical paramaters

| Indoor Unit Model            |          |         | 76000BTU                     | 96000BTU        | 120000BTU           |
|------------------------------|----------|---------|------------------------------|-----------------|---------------------|
| Power supply                 |          | V/Hz/Ph | 220-240/50/1                 | 220-240/50/1    | 220-240/50/1        |
| Cooling                      | Capacity | Btu/h   | 76,000                       | 96,000          | 121,000             |
|                              |          | kW      | 22.3                         | 28.1            | 35.0                |
|                              | Input    | kW      | 7.5                          | 9.6             | 13                  |
|                              | EER      | W/W     | 2.97                         | 2.93            | 2.69                |
| Heating                      | Capacity | Btu/h   | 85,300                       | 106,000         | -                   |
|                              |          | kW      | 25.0                         | 31.0            | -                   |
|                              | Input    | kW      | 8.3                          | 10.3            | -                   |
|                              | COP      | W/W     | 3.01                         | 3.02            | -                   |
| Max power input              |          | W       | 700                          | 700             | 17300 (Whole units) |
| Max current                  |          | A       | 3.0                          | 3.0             | 28.6 (Whole units)  |
| Air Flow (H)                 |          | m3/h    | 4300                         | 4800            | 6,060               |
| Noise Level                  |          | dB(A)   | 56                           | 56              | 65                  |
| Fan/Drive type               |          |         | Centrifugal/Direct           |                 |                     |
| Coil                         |          |         | Copper tube and aluminum fin |                 |                     |
| Controller                   |          |         | Remote controller            |                 |                     |
| Net Dimension(WxHxD)         |          | mm      | 1,200×1,860×518              | 1,200×1,860×518 | 1,200×1,860×518     |
| Packing Dimension(WxHxD)     |          | mm      | 1,362×2,050×582              | 1,362×2,050×582 | 1,362×2,050×582     |
| Net/Gross Weight             |          | kg      | 130/145                      | 140/154         | 148/174             |
| Outdoor Unit Model           |          |         | 76000BTU                     | 96000BTU        | 120000BTU           |
| Power supply                 |          | V/Hz/Ph | 380-415/50/3                 | 380-415/50/3    | 380-415/50/3        |
| Max power input              |          | kW      | 11.7                         | 14.4            | 17.3 (Whole units)  |
| Max current                  |          | A       | 19.3                         | 23.7            | 28.6 (Whole units)  |
| Noise Level                  |          | dB(A)   | 68                           | 68              | 69                  |
| Compressor (Type / Quantity) |          |         | Scroll / 1                   | Scroll / 1      | Scroll / 1          |
| Refrigerant (Type / Charged) |          |         | R410A / 5.4kg                | R410A / 5.5kg   | R410A / 7.2kg       |
| Fan type / Drive type        |          |         | Axial / Direct               |                 |                     |
| Coil                         |          |         | Copper tube and aluminum fin |                 |                     |
| Piping size                  | Liquid   | mm      | φ9.52                        | φ9.52           | φ12.7               |
|                              | Gas      | mm      | φ22                          | φ25             | φ28.6               |
| Ambient temperature          |          | °C      | 17~46                        | 17~46           | 17~52               |
| Net Dimension(WxHxD)         |          | mm      | 1,260×908×700                | 1,260×908×700   | 1,260×908×700       |
| Packing Dimension(WxHxD)     |          | mm      | 1,320×1,060×730              | 1,320×1,060×730 | 1,320×1,060×730     |
| Net/Gross Weight             |          | kg      | 174/193                      | 187/204         | 199/215             |



R410a Duct AC technical paramaters

| Indoor Unit Model                 |          |         | 76000BTU                     | 96000BTU        | 120000BTU       |
|-----------------------------------|----------|---------|------------------------------|-----------------|-----------------|
| Power supply                      |          | V/Hz/Ph | 220-240/50/1                 | 220-240/50/1    | 220-240/50/1    |
| Cooling                           | Capacity | Btu/h   | 76,000                       | 96,000          | 120,000         |
|                                   |          | kW      | 22.3                         | 28.1            | 35.0            |
|                                   | Input    | kW      | 7.5                          | 9.6             | 11.9            |
|                                   | EER      | W/W     | 2.97                         | 2.93            | 2.94            |
| Heating                           | Capacity | Btu/h   | 85,300                       | 106,000         | 129,700         |
|                                   |          | kW      | 25.0                         | 31.1            | 38.0            |
|                                   | Input    | kW      | 8.3                          | 10.3            | 12.7            |
|                                   | COP      | W/W     | 3.01                         | 3.02            | 2.99            |
| Max power input                   |          | W       | 1300                         | 1400            | 2000.0          |
| Max current                       |          | A       | 5.2                          | 5.8             | 9               |
| Air Flow (H)                      |          | m3/h    | 4250                         | 5100            | 6375            |
| Standard external static pressure |          | Pa      | 100                          | 100             | 100             |
| Noise Level                       |          | dB(A)   | 56                           | 56              | 63              |
| Fan/Drive type                    |          |         | Centrifugal/Direct           |                 |                 |
| Coil                              |          |         | Copper tube and aluminum fin |                 |                 |
| Controller                        |          |         | Wired controller             |                 |                 |
| Net Dimension(WxHxD)              |          | mm      | 1,452×462×797                | 1,452×462×797   | 1,452×462×797   |
| Packing Dimension(WxHxD)          |          | mm      | 1,555×500×875                | 1,555×500×875   | 1,555×500×875   |
| Net/Gross Weight                  |          | kg      | 94/106                       | 96/108          | 97/109          |
| Outdoor Unit Model                |          |         | 76000BTU                     | 96000BTU        | 120000BTU       |
| Power supply                      |          | V/Hz/Ph | 380-415/50/3                 | 380-415/50/3    | 380-415/50/3    |
| Max power input                   |          | kW      | 11.7                         | 14.4            | 17.3            |
| Max current                       |          | A       | 19.3                         | 23.7            | 28.6            |
| Noise Level                       |          | dB(A)   | 68                           | 68              | 69              |
| Compressor (Type / Quantity)      |          |         | Scroll / 1                   | Scroll / 1      | Scroll / 1      |
| Refrigerant (Type / Charged)      |          |         | R410A / 5.4kg                | R410A / 5.5kg   | R410A / 7.5kg   |
| Fan type / Drive type             |          |         | Axial / Direct               |                 |                 |
| Coil                              |          |         | Copper tube and aluminum fin |                 |                 |
| Piping size                       | Liquid   | mm      | φ9.52                        | φ9.52           | φ12.7           |
|                                   | Gas      | mm      | φ22                          | φ25             | φ28.6           |
| Ambient temperature               |          | °C      | 17~46                        | 17~46           | 17~46           |
| Net Dimension(WxHxD)              |          | mm      | 1,260×908×700                | 1,260×908×700   | 1,260×908×700   |
| Packing Dimension(WxHxD)          |          | mm      | 1,320×1,060×730              | 1,320×1,060×730 | 1,320×1,060×730 |
| Net/Gross Weight                  |          | kg      | 174/193                      | 187/204         | 201/217         |





50Hz R410a Rooftop Units technical paramaters

| Nominal ton*                      |                   |          | 6.2                  | 7.5                  | 8.5                | 10                 | 12.5               |
|-----------------------------------|-------------------|----------|----------------------|----------------------|--------------------|--------------------|--------------------|
| Cooling                           | Capacity          | Btu/h    | 75,000               | 89,000               | 103,000            | 120,000            | 150,000            |
|                                   |                   | kW       | 22.0                 | 26.0                 | 30.0               | 35.0               | 44.0               |
|                                   | Input             | kW       | 6.6                  | 7.9                  | 9.3                | 10.7               | 13.3               |
|                                   | EER               | Btu/h.kW | 11.4                 | 11.3                 | 11.1               | 11.2               | 11.3               |
| Heatling                          | Capacity          | Btu/h    | 89,000               | 103,000              | 120,000            | 137,000            | 154,000            |
|                                   |                   | kW       | 26.0                 | 30.0                 | 35.0               | 40.0               | 45.0               |
|                                   | Input             | kW       | 7.5                  | 8.9                  | 10.6               | 11.9               | 13.2               |
|                                   | COP               | Btu/h.kW | 11.9                 | 11.6                 | 11.3               | 11.5               | 11.7               |
| Air flow                          | Indoor side       | CFM      | 2,800                | 2,830                | 3,500              | 4,100              | 5,500              |
| ESP                               |                   | Pa       | Default:80; 0~250    | Default:80; 0~250    | Default:80; 0~200  | Default:90; 0~250  | Default:110; 0~275 |
| Max. power input                  |                   | kW       | 8.6                  | 12.0                 | 13.6               | 16.0               | 19.7               |
| Max. current                      |                   | A        | 18.3                 | 24.8                 | 26.5               | 28.8               | 38.2               |
| Supply power                      | V/Ph/Hz           |          | 380-415V/3Ph/50Hz    | 380-415V/3Ph/50Hz    | 380-415V/3Ph/50Hz  | 380-415V/3Ph/50Hz  | 380-415V/3Ph/50Hz  |
| Compressor                        | Brand             |          | Copeland             | Danfoss              | Hitachi            | Hitachi            | Copeland           |
|                                   | Type              |          | Scroll               | Scroll               | Scroll             | Scroll             | Scroll             |
|                                   | Quantity          |          | 1                    | 1                    | 2                  | 2                  | 2                  |
|                                   | Refrigerant       |          | R410a                | R410a                | R410a              | R410a              | R410a              |
| Indoor fan                        | Type / Drive type |          | Centrifugal / Direct | Centrifugal / Direct | Centrifugal / Belt | Centrifugal / Belt | Centrifugal / Belt |
| Outdoor fan                       | Type / Drive type |          | Axial / Direct       | Axial / Direct       | Axial / Direct     | Axial / Direct     | Axial / Direct     |
| Wired controller                  |                   |          | KJR-25B              | KJR-25B              | KJR-12B/dP(T)-E    | KJR-12B/dP(T)-E    | KJR-12B/dP(T)-E    |
| Centralized controller (Optional) |                   |          | No                   | No                   | Yes                | Yes                | Yes                |
| Ambient temperature               | Cooling           |          | 10°C~46°C            | 10°C~46°C            | 10°C~46°C          | 10°C~46°C          | 10°C~46°C          |
|                                   | Heating           |          | -9°C~24°C            | -9°C~24°C            | -9°C~24°C          | -9°C~24°C          | -9°C~24°C          |
| Dimension                         | Net (W×H×D)       | mm       | 1,475×840×1,130      | 1,475×840×1,130      | 1,483×1,138×1,231  | 1,483×1,138×1,231  | 1,965×1,230×1,130  |
|                                   | Packing (W×H×D)   | mm       | 1,495×870×1,150      | 1,495×870×1,150      | 1,500×1,255×1,155  | 1,500×1,255×1,155  | 1,995×1,255×1,160  |
| Weight                            | Net / Gross       | kg       | 229/234              | 325/335              | 340/350            | 343/354            | 451/471            |

- Notes:
- Cooling capacity test condition (1):Outdoor ambient temperature: 35°C, indoor temperature 26.7°C DB / 19.4°C WB;  
Heating capacity test condition (2):Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 26.7°C DB / 19.4°C WB;
  - Units are suitable for operation to ±20% of nominal CFM;
  - Specifications are subject to change without prior notice for product improvement.
  - \* Nominal ton only for reference.
  - Cooling or heating capacity as per specifications.



50Hz R410a Rooftop Units technical paramaters

| Nominal ton*                      |                   |          | 15                 | 17.5               | 20                 | 25                 | 30                  |
|-----------------------------------|-------------------|----------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Cooling                           | Capacity          | Btu/h    | 180,000            | 208,000            | 240,000            | 300,000            | 335,000             |
|                                   |                   | kW       | 53.0               | 61.0               | 70.0               | 88.0               | 98.0                |
|                                   | Input             | kW       | 16.7               | 19.1               | 22.6               | 28.9               | 32.8                |
|                                   | EER               | Btu/h.kW | 10.8               | 10.9               | 10.6               | 10.4               | 10.2                |
| Heatling                          | Capacity          | Btu/h    | 191,000            | 218,000            | 260,000            | 330,000            | 380,000             |
|                                   |                   | kW       | 56.0               | 64.0               | 75.0               | 97.0               | 111.5               |
|                                   | Input             | kW       | 17.2               | 19.5               | 23.6               | 30.3               | 36.5                |
|                                   | COP               | Btu/h.kW | 11.1               | 11.2               | 11.0               | 10.9               | 10.4                |
| Air flow                          | Indoor side       | CFM      | 7,000              | 7,600              | 8,800              | 10,000             | 11,200              |
| ESP                               |                   | Pa       | Default:110; 0~325 | Default:110; 0~250 | Default:120; 0~375 | Default:130; 0~350 | Default:270; 25~400 |
| Max. power input                  |                   | kW       | 25.0               | 27.0               | 32.5               | 38.5               | 49.5                |
| Max. current                      |                   | A        | 46.1               | 55.4               | 63.2               | 74.3               | 81.7                |
| Supply power                      | V/Ph/Hz           |          | 380-415V/3Ph/50Hz  | 380-415V/3Ph/50Hz  | 380-415V/3Ph/50Hz  | 380-415V/3Ph/50Hz  | 380-415V/3Ph/50Hz   |
| Compressor                        | Brand             |          | Copeland           | Copeland           | Copeland           | Danfoss            | Danfoss             |
|                                   | Type              |          | Scroll             | Scroll             | Scroll             | Scroll             | Scroll              |
|                                   | Quantity          |          | 2                  | 2                  | 2                  | 2                  | 2                   |
|                                   | Refrigerant       |          | R410a              | R410a              | R410a              | R410a              | R410a               |
| Indoor fan                        | Type / Drive type |          | Centrifugal / Belt | Centrifugal / Belt | Centrifugal / Belt | Centrifugal / Belt | Centrifugal / Belt  |
| Outdoor fan                       | Type / Drive type |          | Axial / Direct     | Axial / Direct     | Axial / Direct     | Axial / Direct     | Axial / Direct      |
| Wired controller                  |                   |          | KJR-12B/dP(T)-E    | KJR-12B/dP(T)-E    | KJR-12B/dP(T)-E    | KJR-12B/dP(T)-E    | KJR-12B/dP(T)-E     |
| Centralized controller (Optional) |                   |          | Yes                | Yes                | Yes                | Yes                | Yes                 |
| Ambient temperature               | Cooling           |          | 10°C~46°C          | 10°C~46°C          | 10°C~46°C          | 10°C~46°C          | 10°C~46°C           |
|                                   | Heating           |          | -9°C~24°C          | -9°C~24°C          | -9°C~24°C          | -9°C~24°C          | -9°C~24°C           |
| Dimension                         | Net (W×H×D)       | mm       | 1,965×1,230×1,130  | 1,670×1,247×2,192  | 1,670×1,247×2,192  | 2,320×1,245×2,220  | 2,320×1,245×2,220   |
|                                   | Packing (W×H×D)   | mm       | 1,995×1,255×1,160  | 1,695×1,284×2,212  | 1,695×1,284×2,212  | 2,330×1,275×2,230  | 2,330×1,275×2,230   |
| Weight                            | Net / Gross       | kg       | 492/512            | 615/645            | 690/720            | 940/970            | 955/985             |

- Notes:
- Cooling capacity test condition (1):Outdoor ambient temperature: 35°C, indoor temperature 26.7°C DB / 19.4°C WB;  
Heating capacity test condition (2):Outdoor ambient temperature: 7°C DB / 6°C WB, indoor temperature 26.7°C DB / 19.4°C WB;
  - Units are suitable for operation to ±20% of nominal CFM;
  - Specifications are subject to change without prior notice for product improvement.
  - \* Nominal ton only for reference.
  - Cooling or heating capacity as per specifications.



60Hz R410a Rooftop Units technical paramaters

| Nominal ton*                      |                   |          | 5.0                  | 6.2                | 7.5                | 8.5                | 10                 |
|-----------------------------------|-------------------|----------|----------------------|--------------------|--------------------|--------------------|--------------------|
| Type                              |                   |          | Two-way air out-in   |                    |                    |                    |                    |
| Cooling                           | Capacity(1)       | Btu/h    | 59,000               | 75,000             | 89,000             | 103,000            | 120,000            |
|                                   |                   | kW       | 17.3                 | 22.0               | 26.1               | 30.2               | 35.2               |
|                                   | Input(1)          | kW       | 5.9                  | 7.7                | 9.2                | 10.5               | 11.4               |
|                                   | EER(1)            | Btu/h.kW | 10.0                 | 9.7                | 9.7                | 9.8                | 10.5               |
|                                   | Capacity(2)       | Btu/h    | 49,000               | 62,700             | 74,500             | 85,600             | 100,000            |
|                                   |                   | kW       | 14.4                 | 18.4               | 21.8               | 25.1               | 29.3               |
|                                   | Input(2)          | kW       | 7.2                  | 8.6                | 9.9                | 11.4               | 13.6               |
|                                   | EER(2)            | Btu/h.kW | 6.8                  | 7.3                | 7.5                | 7.5                | 7.4                |
| Air flow                          | Indoor side       | CFM      | 1,900                | 2,600              | 3,000              | 3,600              | 3,800              |
| ESP                               |                   | Pa       | 50                   | 60                 | 60                 | 75                 | 75                 |
| Max. power input                  |                   | kW       | 8.3                  | 13.2               | 13.2               | 14.7               | 16.8               |
| Max. current                      |                   | A        | 28.5                 | 42.0               | 42.0               | 47.1               | 55.0               |
| Supply power                      | V/Ph/Hz           |          | 220V3Ph~ 60Hz        |                    |                    |                    |                    |
| Compressor                        | Brand             |          | Copeland             | Danfoss            | Danfoss            | Danfoss            | Danfoss            |
|                                   | Type              |          | Scroll               | Scroll             | Scroll             | Scroll             | Scroll             |
|                                   | Quantity          |          | 1                    | 1                  | 1                  | 1                  | 1                  |
|                                   | Refrigerant       |          | R410a                | R410a              | R410a              | R410a              | R410a              |
| Indoor fan                        | Type / Drive type |          | Centrifugal / Direct | Centrifugal / Belt | Centrifugal / Belt | Centrifugal / Belt | Centrifugal / Belt |
| Outdoor fan                       | Type / Drive type |          | Axial / Direct       | Axial / Direct     | Axial / Direct     | Axial / Direct     | Axial / Direct     |
| Wired controller                  |                   |          | KJR-12B/dP(T)-E      |                    |                    |                    |                    |
| Centralized controller (Optional) |                   |          | Yes                  | Yes                | Yes                | Yes                | Yes                |
| Ambient temperature               | Cooling           |          | 18°C~52°C            |                    |                    |                    |                    |
|                                   | Heating           |          |                      | -9°C~24°C          | -9°C~24°C          | -9°C~24°C          | -9°C~24°C          |
| Dimension                         | Net (W×H×D)       | mm       | 1920x840x1068        | 1630x1068x1065     | 1630x1068x1065     | 2165x1002x1335     | 2165x1002x1335     |
|                                   | Packing (W×H×D)   | mm       | 1955x870x1085        | 1700x1110x1155     | 1700x1110x1155     | 2220x1040x1415     | 2220x1040x1415     |
| Weight                            | Net / Gross       | kg       | 228/232              | 315/338            | 315/335            | 445/458            | 445/458            |

Notes:

1.Cooling capacity test condition (1):Outdoor ambient temperature: 35°C, indoor temperature 26.7°C DB / 19.4°C WB;  
Cooling capacity test condition (2):Outdoor ambient temperature: 46.1°C, indoor temperature 26.7°C DB / 19.4°C WB;

2.Specifications are subject to change without prior notice for product improvement.

3.\* Nominal ton only for reference.

4.Cooling or heating capacity as per specifications.



60Hz R410a Rooftop Units technical paramaters

| Nominal ton*                      |                   |          | 12.5               | 15                 | 17.5               | 20                 |
|-----------------------------------|-------------------|----------|--------------------|--------------------|--------------------|--------------------|
| Type                              |                   |          | Two-way air out-in |                    |                    |                    |
| Cooling                           | Capacity(1)       | Btu/h    | 150,000            | 180,000            | 205,000            | 240,000            |
|                                   |                   | kW       | 44.0               | 52.8               | 60.1               | 70.3               |
|                                   | Input(1)          | kW       | 15.3               | 18.1               | 20.1               | 23.6               |
|                                   | EER(1)            | Btu/h.kW | 9.8                | 10                 | 10.2               | 10.1               |
|                                   | Capacity(2)       | Btu/h    | 125,600            | 159,600            | 180,600            | 213,000            |
|                                   |                   | kW       | 34.2               | 46.7               | 52.9               | 62.4               |
|                                   | Input(2)          | kW       | 16.8               | 20.2               | 23.5               | 27.7               |
|                                   | EER(2)            | Btu/h.kW | 7.5                | 7.9                | 7.7                | 7.7                |
| Air flow                          | Indoor side       | CFM      | 5,200              | 6,600              | 7,300              | 8,400              |
| ESP                               |                   | Pa       | 90                 | 90                 | 100                | 100                |
| Max. power input                  |                   | kW       | 20.9               | 26.8               | 32.8               | 38.2               |
| Max. current                      |                   | A        | 69.2               | 87.9               | 98.6               | 127.3              |
| Supply power                      | V/Ph/Hz           |          | 220V3Ph~ 60Hz      |                    |                    |                    |
| Compressor                        | Brand             |          | Copeland           | Danfoss            | Danfoss            | Danfoss            |
|                                   | Type              |          | Scroll             | Scroll             | Scroll             | Scroll             |
|                                   | Quantity          |          | 2                  | 2                  | 2                  | 2                  |
|                                   | Refrigerant       |          | R410a              | R410a              | R410a              | R410a              |
| Indoor fan                        | Type / Drive type |          | Centrifugal / Belt | Centrifugal / Belt | Centrifugal / Belt | Centrifugal / Belt |
| Outdoor fan                       | Type / Drive type |          | Axial / Direct     | Axial / Direct     | Axial / Direct     | Axial / Direct     |
| Wired controller                  |                   |          | KJR-12B/dP(T)-E    |                    |                    |                    |
| Centralized controller (Optional) |                   |          | Yes                | Yes                | Yes                | Yes                |
| Ambient temperature               | Cooling           |          | 18°C~52°C          |                    |                    |                    |
|                                   | Heating           |          |                    | -9°C~24°C          | -9°C~24°C          | -9°C~24°C          |
| Dimension                         | Net (W×H×D)       | mm       | 2229x1245x1400     | 2229x1245x1825     | 2229x1245x1825     | 2753x1245x2157     |
|                                   | Packing (W×H×D)   | mm       | 2265x1280x1455     | 2236x1280x1855     | 2236x1280x1855     | 2760x1280x2175     |
| Weight                            | Net / Gross       | kg       | 520/535            | 710/730            | 720/740            | 925/940            |

Notes:

1.Cooling capacity test condition (1):Outdoor ambient temperature: 35°C, indoor temperature 26.7°C DB / 19.4°C WB;  
Cooling capacity test condition (2):Outdoor ambient temperature: 46.1°C, indoor temperature 26.7°C DB / 19.4°C WB;

2.Specifications are subject to change without prior notice for product improvement.

3.\* Nominal ton only for reference.

4.Cooling or heating capacity as per specifications.



Product Feature:

- Function: Cooling, Heating, Electric heating, Fresh Air, DC inverter, Gas Burnt
- Refrigerant: R22, R407c, R410a
- Adopt famous brand hermetic scroll compressor
- Flexible installation. It can be installed on the roof or outdoor space
- Famous brand fan motor.
- The unit uses advanced microcomputer control system and advanced thorough security system to ensure the efficient operation of the unit all the year round



Packaged Rooftop Airconditioning Unit technical paramaters

| Cooling capacity(tons) | Cooling capacity(kW) | Heating capacity(kW) | Air flow (m3/h) | ESP (Pa) | Consumed power(kW) |         | Noise ≤dB(A) | Dimension |       |       | Weight (kg) |
|------------------------|----------------------|----------------------|-----------------|----------|--------------------|---------|--------------|-----------|-------|-------|-------------|
|                        |                      |                      |                 |          | Cooling            | Heating |              | L(mm)     | W(mm) | H(mm) |             |
| 18.0                   | 62.3                 | 65.6                 | 12,000          | 200      | 23.90              | 39.16   | 72           | 3,450     | 1,800 | 1,450 | 1,285       |
|                        |                      |                      |                 | 500      | 25.00              | 40.26   | 71           |           |       |       |             |
| 19.0                   | 66.1                 | 69.6                 | 13,000          | 200      | 26.06              | 43.08   | 73           | 3,450     | 1,800 | 1,450 | 1,310       |
|                        |                      |                      |                 | 500      | 27.71              | 44.73   | 72           |           |       |       |             |
| 20.0                   | 68.6                 | 72.2                 | 14,000          | 200      | 30.73              | 49.70   | 76           | 3,450     | 1,800 | 1,450 | 1,400       |
|                        |                      |                      |                 | 500      | 32.93              | 51.90   | 75           |           |       |       |             |
| 25.0                   | 87.5                 | 92.1                 | 16,000          | 300      | 30.20              | 52.42   | 76           | 4,775     | 1,800 | 1,700 | 1,735       |
|                        |                      |                      |                 | 500      | 32.40              | 51.90   | 76           |           |       |       |             |
| 28.5                   | 99.5                 | 104.8                | 16,800          | 300      | 38.54              | 63.24   | 77           | 4,775     | 1,800 | 1,700 | 1,820       |
|                        |                      |                      |                 | 500      | 40.74              | 65.44   | 77           |           |       |       |             |
| 32.5                   | 114.8                | 120.9                | 21,000          | 300      | 45.92              | 76.09   | 78           | 4,650     | 1,800 | 2,230 | 2,265       |
|                        |                      |                      |                 | 550      | 45.92              | 76.09   | 77           |           |       |       |             |
| 35.0                   | 123.9                | 130.5                | 22,000          | 300      | 50.39              | 81.00   | 78           | 4,650     | 1,800 | 2,230 | 2,340       |
|                        |                      |                      |                 | 550      | 54.24              | 84.45   | 78           |           |       |       |             |
| 37.5                   | 131.1                | 140.2                | 23,500          | 350      | 54.06              | 85.04   | 79           | 4,650     | 1,800 | 2,230 | 2,420       |
|                        |                      |                      |                 | 550      | 57.91              | 88.89   | 79           |           |       |       |             |
| 41.0                   | 143.8                | 151.4                | 25,000          | 350      | 62.30              | 100.32  | 80           | 4,650     | 1,800 | 2,230 | 2,510       |
|                        |                      |                      |                 | 550      | 62.30              | 100.32  | 79           |           |       |       |             |
| 49.0                   | 171.3                | 180.4                | 28,000          | 400      | 68.61              | 107.26  | 81           | 6,000     | 2,250 | 2,340 | 3,245       |
|                        |                      |                      |                 | 600      | 73.01              | 111.66  | 80           |           |       |       |             |
| 51.5                   | 180.2                | 189.8                | 29,000          | 400      | 73.48              | 112.61  | 81           | 6,000     | 2,250 | 2,340 | 3,380       |
|                        |                      |                      |                 | 600      | 77.88              | 117.01  | 81           |           |       |       |             |
| 54.0                   | 189.8                | 199.9                | 30,000          | 400      | 81.55              | 127.65  | 82           | 6,000     | 2,250 | 2,340 | 3,520       |
|                        |                      |                      |                 | 600      | 81.55              | 127.65  | 81           |           |       |       |             |
| 57.0                   | 199.1                | 209.7                | 31,000          | 400      | 85.22              | 131.69  | 83           | 6,000     | 2,250 | 2,340 | 3,590       |
|                        |                      |                      |                 | 650      | 85.22              | 131.69  | 82           |           |       |       |             |

- Evaporator and condensor are using copper aluminum fin
- Temperature controlling range is 16-30°C . temperature controlling accuracy is ±2°C
- Electrical heating is finned type stainless steel electrical heating
- Power consumption includes the summation of heat pump heating and auxiliary electrical heating
- Power supply: 380V/3Ph/50Hz
- Refrigerant: R22. If the refrigerant is R407c, the parameter is ditto.





R410a air cooled Mini Chiller technical paramaters

| Capacity(kW)                           |                       |         | 5.0                                                            | 7.2             | 10.5            |
|----------------------------------------|-----------------------|---------|----------------------------------------------------------------|-----------------|-----------------|
| Power supply                           |                       | V/Ph/Hz | 220-240/1/50                                                   | 220-240/1/50    | 220-240/1/50    |
| Cooling                                | Capacity              | kW      | 5.0                                                            | 7.2             | 10.5            |
|                                        | Input                 | kW      | 1.9                                                            | 2.8             | 3.6             |
| Heating                                | Capacity              | kW      | 5.5                                                            | 7.7             | 12.0            |
|                                        | Input                 | kW      | 2.0                                                            | 2.8             | 4.0             |
| Max. input current                     |                       | A       | 11.7                                                           | 16.7            | 25.7            |
| Compressor                             | Type                  |         | Rotary                                                         | Rotary          | Fixed Scroll    |
|                                        | Quantity              | Pieces  | 1                                                              | 1               | 1               |
| Air side heat exchanger                | Type                  |         | Fin-coil                                                       | Fin-coil        | Fin-coil        |
|                                        | Fan motor type        |         | AC Motor                                                       | AC Motor        | AC Motor        |
|                                        | Quantity of fan motor | Pieces  | 1                                                              | 1               | 2               |
|                                        | Air flow              | m3/h    | 5563                                                           | 5624            | 6500            |
| Water side heat exchanger              | Type                  |         | Plate type                                                     | Plate type      | Plate type      |
|                                        | Water flow            | m3/h    | 0.86                                                           | 1.24            | 1.74            |
|                                        | Water pressure drop   | kPa     | 21                                                             | 35              | 44              |
| Water pump                             | Pump head             | m       | 6                                                              | 6               | 8               |
|                                        | Water volume          | L/min   | 4                                                              | 4               | 7.5             |
| Expansion tank volume                  |                       | L       | 2                                                              | 2               | 3               |
| Refrigerant                            | Type                  |         | R410a                                                          | R410a           | R410a           |
|                                        | Charged volume        | kg      | 1.6                                                            | 2.1             | 3.0             |
|                                        | Throttle type         |         | Capillary                                                      | Capillary       | Capillary       |
| Sound pressurer level                  |                       | dB(A)   | 55                                                             | 56              | 60              |
| Unit net dimension (W×H×D)             |                       | mm      | 990×966×354                                                    | 990×966×354     | 940×1245×360    |
| Packing dimension (W×H×D)              |                       | mm      | 1,120×1,100×435                                                | 1,120×1,100×435 | 1,058×1,300×438 |
| Net/ Gross weight                      |                       | kg      | 83/89                                                          | 94/100          | 138/145         |
| The Max. and Min. water inlet pressure |                       | kPa     | 500/150                                                        | 500/150         | 500/150         |
| Pipe connections                       | Water inlet/outlet    | mm      | DN25                                                           | DN25            | DN32            |
| Controller                             |                       |         | Electronic controller (standard), remote controller (optional) |                 |                 |
| Ambient temperature range              | Cooling               | °C      | 10~43                                                          | 10~43           | 10~43           |
|                                        | Heating               | °C      | -15-24                                                         | -15-24          | -15-24          |
| Water outlet temperature range         | Cooling               | °C      | 10~20                                                          | 10~20           | 10~20           |
|                                        | Heating               | °C      | 30~50                                                          | 30~50           | 30~50           |

R410a air cooled Mini Chiller technical paramaters

| Capacity(kW)                                                   |                       |         | 10.5            | 12              | 14              | 16              |
|----------------------------------------------------------------|-----------------------|---------|-----------------|-----------------|-----------------|-----------------|
| Power supply                                                   |                       | V/Ph/Hz | 380-415/ 3/50   | 380-415/ 3/50   | 380-415/ 3/50   | 380-415/ 3/50   |
| Cooling                                                        | Capacity              | kW      | 10.5            | 12.0            | 14.0            | 16.0            |
|                                                                | Input                 | kW      | 3.9             | 4.4             | 4.9             | 6.4             |
| Heating                                                        | Capacity              | kW      | 12.0            | 14.0            | 16.1            | 18.0            |
|                                                                | Input                 | kW      | 4.2             | 4.6             | 5.2             | 6.4             |
| Max. input current                                             |                       | A       | 8.3             | 9.1             | 10.5            | 14.3            |
| Compressor                                                     | Type                  |         | Fixed Scroll    | Fixed Scroll    | Fixed Scroll    | Fixed Scroll    |
|                                                                | Quantity              | Pieces  | 1               | 1               | 1               | 1               |
| Air side heat exchanger                                        | Type                  |         | Fin-coil        | Fin-coil        | Fin-coil        | Fin-coil        |
|                                                                | Fan motor type        |         | AC Motor        | AC Motor        | AC Motor        | AC Motor        |
|                                                                | Quantity of fan motor | Pieces  | 2               | 2               | 2               | 2               |
|                                                                | Air flow              | m3/h    | 7000            | 7000            | 7000            | 7000            |
| Water side heat exchanger                                      | Type                  |         | Plate type      | Plate type      | Plate type      | Plate type      |
|                                                                | Water flow            | m3/h    | 1.72            | 2.0             | 2.4             | 2.8             |
|                                                                | Water pressure drop   | kPa     | 44              | 40              | 34              | 38              |
| Water pump                                                     | Pump head             | m       | 8               | 8               | 8               | 8               |
|                                                                | Water volume          | L/min   | 7.5             | 7.5             | 7.5             | 7.5             |
| Expansion tank volume                                          |                       | L       | 3               | 3               | 3               | 3               |
| Refrigerant                                                    | Type                  |         | R410a           | R410a           | R410a           | R410a           |
|                                                                | Charged volume        | kg      | 2.7             | 3.0             | 3.6             | 4.2             |
|                                                                | Throttle type         |         | Capillary       | Capillary       | Capillary       | Capillary       |
| Sound pressurer level                                          |                       | dB(A)   | 58              | 59              | 60              | 60              |
| Unit net dimension (W×H×D)                                     |                       | mm      | 940×1,245×360   | 1,070×1,249×420 | 1,070×1,249×420 | 1,070×1,249×420 |
| Packing dimension (W×H×D)                                      |                       | mm      | 1,058×1,300×438 | 1,188×1,385×498 | 1,188×1,385×498 | 1,188×1,385×498 |
| Net/ Gross weight                                              |                       | kg      | 131/139         | 137/145         | 145/160         | 151/165         |
| The Max. and Min. water inlet pressure                         |                       | kPa     | 500/150         | 500/150         | 500/150         | 500/150         |
| Pipe connections                                               | Water inlet/outlet    | mm      | DN32            | DN32            | DN32            | DN32            |
| Electronic controller (standard), remote controller (optional) |                       |         |                 |                 |                 |                 |
| Ambient temperature range                                      | Cooling               | °C      | 10~43           | 10~43           | 10~43           | 10~43           |
|                                                                | Heating               | °C      | -15-24          | -15-24          | -15-24          | -15-24          |
| Water outlet temperature range                                 | Cooling               | °C      | 10~20           | 10~20           | 10~20           | 10~20           |
|                                                                | Heating               | °C      | 30~50           | 30~50           | 30~50           | 30~50           |

1. Cooling: Chilled water inlet/outlet temperature: 12/7°C,outdoor ambient temperature 35°C DB.
2. Heating: Warm water inlet/outlet temperature: 40/45°C,outdoor ambient temperature 7°C DB/6°C WB.
3. Sound pressurer level:1m away in semi-anechonic room.



R410a air cooled scroll Modular Chiller technical paramaters

| Model                                 | Cooling only              |         | KAW-030K2                                                               | KAW-060K2     | KAW-090K2     | KAW-120K2      |
|---------------------------------------|---------------------------|---------|-------------------------------------------------------------------------|---------------|---------------|----------------|
|                                       | Heat pump                 |         | KAW-030K2R                                                              | KAW-060K2R    | KAW-090K2R    | KAW-120K2R     |
| Cooling capacity                      |                           | kW      | 30                                                                      | 60            | 90            | 120            |
| Heating capacity                      |                           | kW      | 32.5                                                                    | 65.0          | 97.5          | 130.0          |
| Power supply                          |                           | V/Ph/Hz | 380V/ 3Ph/50Hz, three phases four-wire system                           |               |               |                |
| Main controlling function             |                           |         | Modular design, single mainframe can be connected 11 auxilliary engines |               |               |                |
| Compressor                            | Type                      |         | Fixed Scroll / Digital Scroll                                           |               | Fixed Scroll  | Fixed Scroll   |
|                                       | Quantity                  | Pieces  | 2                                                                       | 4             | 3             | 4              |
|                                       | Input                     | kW      | 5.0x2                                                                   | 5.0x4         | 10.0x3        | 10             |
| Water side heat exchanger             | Water flow                | m3/h    | 5.2                                                                     | 10.8          | 15.5          | 20.6           |
|                                       | Water pressure drop       | kPa     | 37                                                                      | 38            | 40            | 40             |
| Heating recovery exchanger (optional) | heating recovery capacity | kW      | 6                                                                       | 12            | 18            | 24             |
|                                       | Water flow                | m3/h    | 1.0                                                                     | 2.0           | 3.0           | 4.4            |
|                                       | Water pressure drop       | kPa     | 24                                                                      | 24            | 24            | 24             |
| Refrigerant                           | Type                      |         | R410a                                                                   | R410a         | R410a         | R410a          |
| Sound pressurer level                 |                           | dB(A)   | 64                                                                      | 68            | 69            | 71             |
| Unit net dimension (L×W×H)            |                           | mm      | 2070×950×1900                                                           | 2070×950×1900 | 2933×950×1900 | 2000×2120×2060 |
| Weight                                |                           | kg      | 550                                                                     | 700           | 1000          | 1350           |



R410a air cooled screw Chiller technical paramaters

| Capacity(kW)                                    |                        |      | 150                                   | 200     | 250     | 300     | 350     | 400     | 500     | 600     |
|-------------------------------------------------|------------------------|------|---------------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Cooling capacity                                |                        | kW   | 137.0                                 | 195.0   | 266.2   | 315.3   | 347.1   | 413.1   | 517.1   | 625.5   |
| Heating capacity                                |                        | kW   | 140.0                                 | 208.6   | 300.2   | 357.1   | 394.1   | 465.9   | 580.7   | 699.1   |
| High temperature heat recycled capacity         | heat recycled capacity | kW   | 0~27.1                                | 0~37.0  | 0~49.1  | 0~58.4  | 0~64.4  | 0~76.2  | 0~95.1  | 0~114.5 |
|                                                 | Water flow             | m3/h | 0~4.5                                 | 0~6.4   | 0~8.4   | 0~10.0  | 0~11.1  | 0~13.1  | 0~16.3  | 0~19.7  |
| Intermediate temperature heat recycled capacity | heat recycled capacity | kW   | 0~180.4                               | 0~246.5 | 0~327.6 | 0~389.3 | 0~429.6 | 0~508.3 | 0~633.8 | 0~763.5 |
|                                                 | Water flow             | m3/h | 0~31.0                                | 0~42.4  | 0~56.3  | 0~66.9  | 0~73.8  | 0~87.4  | 0~109.0 | 0~131.2 |
| Refrigeration compressor power input            |                        | kW   | 41.4                                  | 54.8    | 78.8    | 94.6    | 105.2   | 122.2   | 150.5   | 178.9   |
| Partial load energy adjustment range            |                        | %    | 20-50-75-100%                         |         |         |         |         |         |         |         |
| Evaporator                                      | Water flow             | m3/h | 23.6                                  | 33.5    | 45.8    | 54.2    | 59.7    | 71.0    | 88.9    | 107.6   |
|                                                 | Water side resistance  | kPa  | 30~70                                 |         |         |         |         |         |         |         |
| Dimension(mm)                                   |                        | L    | 2200                                  | 2800    | 3200    | 4000    | 4400    | 4900    | 6200    | 7800    |
|                                                 |                        | W    | 2100(not included the hole for hoist) |         |         |         |         |         |         |         |
|                                                 |                        | H    | 2340                                  |         |         |         |         |         |         |         |
| Weight                                          |                        | kg   | 2050                                  | 2560    | 3320    | 3710    | 3970    | 4450    | 4830    | 5260    |



3 rows 2 pipes system

| Model                     |                          | FP**WA-3             |         | 200           | 300  | 400  | 500  | 600  |
|---------------------------|--------------------------|----------------------|---------|---------------|------|------|------|------|
| Air flow                  | H                        |                      | m3/h    | 340           | 510  | 680  | 850  | 1020 |
|                           | M                        |                      | m3/h    | 270           | 410  | 540  | 660  | 790  |
|                           | L                        |                      | m3/h    | 170           | 255  | 340  | 430  | 510  |
| Cooling capacity          | H                        | total                | W       | 2150          | 3150 | 3950 | 4690 | 5820 |
|                           |                          | sensible             | W       | 1510          | 2230 | 2960 | 3300 | 4250 |
|                           | M                        | total                | W       | 1720          | 2770 | 3240 | 3790 | 4770 |
|                           |                          | sensible             | W       | 1260          | 1800 | 2530 | 3100 | 3670 |
|                           | L                        | total                | W       | 1400          | 2300 | 2680 | 3140 | 3960 |
|                           |                          | sensible             | W       | 980           | 1500 | 1870 | 2260 | 2850 |
| Heating capacity          | H                        |                      | W       | 3610          | 5330 | 6690 | 7850 | 9750 |
|                           | M                        |                      | W       | 2450          | 3690 | 4600 | 6200 | 7050 |
|                           | L                        |                      | W       | 1640          | 2580 | 3200 | 4280 | 5000 |
| Normal asynchronous motor | Power                    |                      | V/PH/Hz | 220V/1PH/50Hz |      |      |      |      |
|                           | Quantity                 |                      | pcs     | 1             | 1    | 1    | 1    | 1    |
|                           | Input power (high speed) | 0Pa                  | W       | 25            | 28   | 43   | 73   | 92   |
|                           |                          | 12Pa                 | W       | 30            | 42   | 52   | 81   | 96   |
|                           |                          | 30Pa                 | W       | 42            | 55   | 70   | 87   | 108  |
|                           |                          | 50Pa                 | W       | 49            | 64   | 80   | 100  | 118  |
| Fan                       | Quantity                 |                      | pcs     | 1             | 2    | 2    | 2    | 2    |
| Coil (3 rows)             | Cooling/ Heating         | Water flow           | m3/h    | 0.37          | 0.54 | 0.70 | 0.81 | 1.00 |
|                           |                          | Water pressure drop  | kPa     | 17            | 19   | 18   | 20   | 26   |
|                           |                          | Max working pressure | Mpa     | 1.6           | 1.6  | 1.6  | 1.6  | 1.6  |
| Noise level               | H (high speed)           | 0Pa                  | dB(A)   | ≤32           | ≤34  | ≤37  | ≤38  | ≤42  |
|                           |                          | 12Pa                 | dB(A)   | ≤33           | ≤36  | ≤38  | ≤41  | ≤43  |
|                           |                          | 30Pa                 | dB(A)   | ≤36           | ≤39  | ≤42  | ≤43  | ≤45  |
|                           |                          | 50Pa                 | dB(A)   | ≤40           | ≤41  | ≤44  | ≤45  | ≤47  |
| Unit net dimension        | L                        | mm                   | 645     | 785           | 875  | 935  | 1065 |      |
|                           | W                        | mm                   | 467     | 467           | 467  | 481  | 481  |      |
|                           | H                        | mm                   | 243     | 243           | 243  | 243  | 243  |      |
| Unit net weight           | without plenum box       |                      | kg      | 11.5          | 14.0 | 15.5 | 16.5 | 19.5 |
|                           | with plenum box          |                      | kg      | 14.0          | 17.0 | 19.0 | 20.0 | 23.5 |
| Optional devices          |                          |                      |         |               |      |      |      |      |
| Model                     |                          | FP**WA-3             |         | 200           | 300  | 400  | 500  | 600  |
| PTC heater                | D1                       |                      | W       | 1000          | 1000 | 1500 | 1500 | 1500 |
|                           | D2                       |                      | W       | 1500          | 1500 | 2000 | 2000 | 2000 |
| Photocatalyst             | UV germicidal lamp power |                      | W       | 10            | 15   | 20   | 20   | 20   |
|                           | weight with plenum box   |                      | kg      | 16.0          | 19.0 | 21.0 | 22.5 | 26.0 |
| DC brushless Motor        | Input power (high speed) | 0Pa                  | W       | 13            | 17   | 20   | 28   | 42   |
|                           |                          | 12Pa                 | W       | 13            | 22   | 31   | 38   | 47   |
|                           |                          | 30Pa                 | W       | 21            | 26   | 42   | 47   | 62   |
|                           |                          | 50Pa                 | W       | 30            | 46   | 53   | 64   | 81   |
|                           | Noise level              | 0Pa                  | dB(A)   | 32            | 32   | 37   | 37   | 42   |
|                           |                          | 12Pa                 | dB(A)   | 33            | 32   | 37   | 41   | 43   |
|                           |                          | 30Pa                 | dB(A)   | 36            | 39   | 39   | 43   | 45   |
|                           |                          | 50Pa                 | dB(A)   | 38            | 41   | 44   | 45   | 46   |

3 rows 2 pipes system

| Model                     |                          | FP**WA-3            |         | 700           | 800   | 1000  | 1200  | 1400  |
|---------------------------|--------------------------|---------------------|---------|---------------|-------|-------|-------|-------|
| Air flow                  | H                        |                     | m3/h    | 1200          | 1360  | 1700  | 2040  | 2380  |
|                           | M                        |                     | m3/h    | 910           | 1030  | 1310  | 1560  | 1830  |
|                           | L                        |                     | m3/h    | 600           | 680   | 850   | 1020  | 1190  |
| Cooling capacity          | H                        | total               | W       | 6500          | 7950  | 9250  | 11250 | 12950 |
|                           |                          | sensible            | W       | 4750          | 5880  | 6850  | 8320  | 9530  |
|                           | M                        | total               | W       | 5500          | 6520  | 7580  | 9300  | 10840 |
|                           |                          | sensible            | W       | 4010          | 4820  | 5450  | 6700  | 8300  |
|                           | L                        | total               | W       | 4560          | 5540  | 6400  | 8000  | 9200  |
|                           |                          | sensible            | W       | 3010          | 3700  | 4700  | 5680  | 6620  |
| Heating capacity          | H                        |                     | W       | 10950         | 12810 | 15930 | 18920 | 21900 |
|                           | M                        |                     | W       | 7950          | 9800  | 11500 | 13800 | 15800 |
|                           | L                        |                     | W       | 5800          | 6800  | 8100  | 9700  | 11000 |
| Normal asynchronous motor | Power                    |                     | V/PH/Hz | 220V/1PH/50Hz |       |       |       |       |
|                           | Quantity                 |                     | pcs     | 1             | 2     | 2     | 2     | 2     |
|                           | Input power (high speed) | 0Pa                 | W       | 104           | 115   | 148   | 170   | 205   |
|                           |                          | 12Pa                | W       | 113           | 134   | 152   | 189   | 228   |
|                           |                          | 30Pa                | W       | 130           | 156   | 174   | 212   | 253   |
|                           |                          | 50Pa                | W       | 160           | 165   | 205   | 240   | 300   |
| Fan                       | Quantity                 |                     | pcs     | 2             | 3     | 4     | 4     | 4     |
| Coil (3 rows)             | Cooling/ Heating         | Water flow          | m3/h    | 1.12          | 1.37  | 1.59  | 1.94  | 2.25  |
|                           |                          | Water pressure drop | kPa     | 40            | 28    | 40    | 30    | 40    |
|                           | Max working pressure     |                     | Mpa     | 1.6           | 1.6   | 1.6   | 1.6   | 1.6   |
| Noise level               | H (high speed)           | 0Pa                 | dB(A)   | ≤44           | ≤43   | ≤45   | ≤46   | ≤49   |
|                           |                          | 12Pa                | dB(A)   | ≤45           | ≤44   | ≤46   | ≤47   | ≤50   |
|                           |                          | 30Pa                | dB(A)   | ≤48           | ≤46   | ≤48   | ≤49   | ≤52   |
|                           |                          | 50Pa                | dB(A)   | ≤50           | ≤48   | ≤50   | ≤52   | ≤54   |
| Unit net dimension        | L                        |                     | mm      | 1185          | 1405  | 1525  | 1725  | 1925  |
|                           | W                        |                     | mm      | 467           | 467   | 467   | 467   | 467   |
|                           | H                        |                     | mm      | 243           | 243   | 243   | 243   | 243   |
| Unit net weight           | without plenum box       |                     | kg      | 21.5          | 26.5  | 30.0  | 33.0  | 37.0  |
|                           | with plenum box          |                     | kg      | 26.0          | 32.0  | 36.0  | 39.5  | 44.5  |
| Optional devices          |                          |                     |         |               |       |       |       |       |
| Model                     |                          | FP**WA-3            |         | 700           | 800   | 1000  | 1200  | 1400  |
| PTC heater                | D1                       |                     | W       | 2000          | 2000  | 2000  | 2500  | 2500  |
|                           | D2                       |                     | W       | 3000          | 3000  | 3000  | 4000  | 4000  |
| Photocatalyst             | UV germicidal lamp power |                     | W       | 25            | 30    | 30    | 40    | 40    |
|                           | weight with plenum box   |                     | kg      | 28.5          | 34.5  | 38.5  | 42.5  | 47.0  |
| DC brushless Motor        | Input power (high speed) | 0Pa                 | W       | 61            | 49    | 66    | 84    | 95    |
|                           |                          | 12Pa                | W       | 67            | 62    | 81    | 101   | 139   |
|                           |                          | 30Pa                | W       | 84            | 79    | 106   | 125   | 158   |
|                           |                          | 50Pa                | W       | 117           | 104   | 135   | 154   | 209   |
|                           | Noise level              | 0Pa                 | dB(A)   | 44            | 42    | 44    | 46    | 48    |
|                           |                          | 12Pa                | dB(A)   | 44            | 43    | 45    | 46    | 50    |
|                           |                          | 30Pa                | dB(A)   | 47            | 46    | 47    | 48    | 51    |
|                           |                          | 50Pa                | dB(A)   | 49            | 48    | 48    | 51    | 53    |

- 1.The motor input power means the whole unit motor input power.
- 2.Design and test according to the GB/T19232-2003<FAN COIL UNITS>.We supply the non-standard product upon customer's request.
- 3.Standard cooling cap.was tested and carried out in environment of EAT27℃ DB / 19.5℃ WB, EWT7℃ , LWT12℃ .
- 4.Standard heating cap.was tested and carried out in environment of 21℃ DB, EWT60℃ .
- 5.Water volume is equal to that in cooling running.
- 6.Noise level testing standard is GB/T19232-200 <FAN COIL UNITS>.
- 7.The pipe connecting directions can be changed during the installation. And the cooling and heating capacity must multiply 0.94.



3+1 rows 4 pipes system

| Model                     |                          | FP**WA-4            |         | 200           | 300  | 400  | 500  | 600  |
|---------------------------|--------------------------|---------------------|---------|---------------|------|------|------|------|
| Air flow                  | H                        |                     | m3/h    | 340           | 510  | 680  | 850  | 1020 |
|                           | M                        |                     | m3/h    | 270           | 410  | 540  | 660  | 790  |
|                           | L                        |                     | m3/h    | 170           | 255  | 340  | 430  | 510  |
| Cooling capacity          | H                        | total               | W       | 2150          | 3150 | 3950 | 4690 | 5820 |
|                           |                          | sensible            | W       | 1510          | 2230 | 2960 | 3300 | 4250 |
|                           | M                        | total               | W       | 1720          | 2770 | 3240 | 3790 | 4770 |
|                           |                          | sensible            | W       | 1260          | 1800 | 2530 | 3100 | 3670 |
|                           | L                        | total               | W       | 1400          | 2300 | 2680 | 3140 | 3960 |
|                           |                          | sensible            | W       | 980           | 1500 | 1870 | 2260 | 2850 |
| Heatng capacity           | H                        |                     | W       | 1500          | 2100 | 2700 | 3150 | 3800 |
|                           | M                        |                     | W       | 1080          | 1530 | 1970 | 2260 | 2270 |
|                           | L                        |                     | W       | 756           | 1070 | 1370 | 1580 | 1940 |
| Normal asynchronous motor | Power                    |                     | V/PH/Hz | 220V/1PH/50Hz |      |      |      |      |
|                           | Quantity                 |                     | pcs     | 1             | 1    | 1    | 1    | 1    |
|                           | Input power (high speed) | 0Pa                 | W       | 34            | 50   | 60   | 70   | 98   |
|                           |                          | 12Pa                | W       | 38            | 54   | 65   | 79   | 100  |
|                           |                          | 30Pa                | W       | 46            | 62   | 75   | 91   | 113  |
|                           |                          | 50Pa                | W       | 51            | 69   | 88   | 105  | 123  |
| Fan                       | Quantity                 |                     | pcs     | 1             | 2    | 2    | 2    | 2    |
| Coil (3 rows)             | Cooling/ Heating         | Water flow          | m3/h    | 0.37          | 0.54 | 0.70 | 0.81 | 1.00 |
|                           |                          | Water pressure drop | kPa     | 11            | 11   | 16   | 16   | 15   |
|                           | Max working pressure     |                     | Mpa     | 1.6           | 1.6  | 1.6  | 1.6  | 1.6  |
| Noise level               | H (high speed)           | 0Pa                 | dB(A)   | ≤33           | ≤35  | ≤38  | ≤40  | ≤43  |
|                           |                          | 12Pa                | dB(A)   | ≤34           | ≤37  | ≤39  | ≤42  | ≤44  |
|                           |                          | 30Pa                | dB(A)   | ≤37           | ≤40  | ≤43  | ≤44  | ≤46  |
|                           |                          | 50Pa                | dB(A)   | ≤40           | ≤42  | ≤45  | ≤46  | ≤48  |
| Unit net dimension        | L                        |                     | mm      | 645           | 785  | 875  | 935  | 1065 |
|                           | W                        |                     | mm      | 467           | 467  | 467  | 481  | 481  |
|                           | H                        |                     | mm      | 243           | 243  | 243  | 243  | 243  |
| Unit net weight           | without plenum box       |                     | kg      | 13.0          | 15.5 | 17.5 | 18.5 | 22.5 |
|                           | with plenum box          |                     | kg      | 15.5          | 18.5 | 20.5 | 22.0 | 26.5 |
| Optional devices          |                          |                     |         |               |      |      |      |      |
| Model                     |                          | FP**WA-4            |         | 200           | 300  | 400  | 500  | 600  |
| PTC heater                | D1                       |                     | W       | 1000          | 1000 | 1500 | 1500 | 1500 |
|                           | D2                       |                     | W       | 1500          | 1500 | 2000 | 2000 | 2000 |
| Photocatalyst             | UV germicidal lamp power |                     | W       | 10            | 15   | 20   | 20   | 20   |
|                           | weight with plenum box   |                     | kg      | 17.5          | 20.5 | 23.0 | 24.5 | 29.0 |
| DC brushless Motor        | Input power (high speed) | 0Pa                 | W       | 25            | 30   | 55   | 72   | 98   |
|                           |                          | 12Pa                | W       | 27            | 44   | 62   | 86   | 110  |
|                           |                          | 30Pa                | W       | 44            | 56   | 80   | 90   | 113  |
|                           |                          | 50Pa                | W       | 49            | 62   | 92   | 100  | 128  |
|                           | Noise level              | 0Pa                 | dB(A)   | 34            | 37   | 39   | 40   | 44   |
|                           |                          | 12Pa                | dB(A)   | 35            | 37   | 40   | 44   | 45   |
|                           |                          | 30Pa                | dB(A)   | 39            | 41   | 44   | 47   | 47   |
|                           |                          | 50Pa                | dB(A)   | 42            | 44   | 46   | 48   | 49   |

3+1 rows 4 pipes system

| Model                     |                          | FP**WA-4            |         | 700           | 800  | 1000 | 1200  | 1400  |
|---------------------------|--------------------------|---------------------|---------|---------------|------|------|-------|-------|
| Air flow                  | H                        |                     | m3/h    | 1200          | 1360 | 1700 | 2040  | 2380  |
|                           | M                        |                     | m3/h    | 910           | 1030 | 1310 | 1560  | 1830  |
|                           | L                        |                     | m3/h    | 600           | 680  | 850  | 1020  | 1190  |
| Cooling capacity          | H                        | total               | W       | 6500          | 7950 | 9250 | 11250 | 12950 |
|                           |                          | sensible            | W       | 4750          | 5880 | 6850 | 8320  | 9530  |
|                           | M                        | total               | W       | 5500          | 6520 | 7580 | 9300  | 10840 |
|                           |                          | sensible            | W       | 4010          | 4820 | 5450 | 6700  | 8300  |
|                           | L                        | total               | W       | 4560          | 5540 | 6400 | 8000  | 9200  |
|                           |                          | sensible            | W       | 3010          | 3700 | 4700 | 5680  | 6620  |
| Heatng capacity           | H                        |                     | W       | 4450          | 5150 | 5850 | 7050  | 7800  |
|                           | M                        |                     | W       | 3250          | 3710 | 4270 | 5150  | 5620  |
|                           | L                        |                     | W       | 2270          | 2630 | 2990 | 3600  | 3930  |
| Normal asynchronous motor | Power                    |                     | V/PH/Hz | 220V/1PH/50Hz |      |      |       |       |
|                           | Quantity                 |                     | pcs     | 1             | 2    | 2    | 2     | 2     |
|                           | Input power (high speed) | 0Pa                 | W       | 120           | 132  | 155  | 190   | 228   |
|                           |                          | 12Pa                | W       | 128           | 147  | 159  | 198   | 239   |
|                           |                          | 30Pa                | W       | 136           | 163  | 182  | 222   | 265   |
|                           |                          | 50Pa                | W       | 168           | 182  | 220  | 262   | 315   |
| Fan                       | Quantity                 |                     | pcs     | 2             | 3    | 4    | 4     | 4     |
| Coil (3 rows)             | Cooling/ Heating         | Water flow          | m3/h    | 1.12          | 1.37 | 1.59 | 1.94  | 2.25  |
|                           |                          | Water pressure drop | kPa     | 32            | 18   | 27   | 20    | 36    |
|                           | Max working pressure     |                     | Mpa     | 1.6           | 1.6  | 1.6  | 1.6   | 1.6   |
| Noise level               | H (high speed)           | 0Pa                 | dB(A)   | ≤46           | ≤44  | ≤47  | ≤49   | ≤51   |
|                           |                          | 12Pa                | dB(A)   | ≤47           | ≤45  | ≤47  | ≤49   | ≤51   |
|                           |                          | 30Pa                | dB(A)   | ≤49           | ≤47  | ≤49  | ≤50   | ≤53   |
|                           |                          | 50Pa                | dB(A)   | ≤51           | ≤49  | ≤51  | ≤53   | ≤55   |
| Unit net dimension        | L                        |                     | mm      | 1185          | 1405 | 1525 | 1725  | 1925  |
|                           | W                        |                     | mm      | 467           | 467  | 467  | 467   | 467   |
|                           | H                        |                     | mm      | 243           | 243  | 243  | 243   | 243   |
| Unit net weight           | without plenum box       |                     | kg      | 24.5          | 29.5 | 34.0 | 37.0  | 41.0  |
|                           | with plenum box          |                     | kg      | 29.0          | 35.0 | 40.0 | 43.5  | 48.5  |
| Optional devices          |                          |                     |         |               |      |      |       |       |
| Model                     |                          | FP**WA-4            |         | 700           | 800  | 1000 | 1200  | 1400  |
| PTC heater                | D1                       |                     | W       | 2000          | 2000 | 2000 | 2500  | 2500  |
|                           | D2                       |                     | W       | 3000          | 3000 | 3000 | 4000  | 4000  |
| Photocatalyst             | UV germicidal lamp power |                     | W       | 25            | 30   | 30   | 40    | 40    |
|                           | weight with plenum box   |                     | kg      | 31.5          | 37.5 | 42.5 | 46.5  | 51.0  |
| DC brushless Motor        | Input power (high speed) | 0Pa                 | W       | 105           | 118  | 150  | 170   | 195   |
|                           |                          | 12Pa                | W       | 110           | 125  | 155  | 190   | 220   |
|                           |                          | 30Pa                | W       | 128           | 145  | 165  | 200   | 245   |
|                           |                          | 50Pa                | W       | 160           | 160  | 195  | 220   | 285   |
|                           | Noise level              | 0Pa                 | dB(A)   | 48            | 44   | 48   | 49    | 51    |
|                           |                          | 12Pa                | dB(A)   | 49            | 46   | 48   | 50    | 51    |
|                           |                          | 30Pa                | dB(A)   | 50            | 48   | 50   | 51    | 53    |
|                           |                          | 50Pa                | dB(A)   | 52            | 50   | 52   | 53    | 54    |

- 1.The motor input power means the whole unit motor input power.
- 2.Design and test according to the GB/T19232-2003<FAN COIL UNITS>.We supply the non-standard product upon customer's request.
- 3.Standard cooling cap.was tested and carried out in environment of EAT27℃ DB / 19.5℃ WB, EWT7℃ , LWT12℃ .
- 4.Standard heating cap.was tested and carried out in environment of 21℃ DB, EWT60℃ .
- 5.Water volume is equal to that in cooling running.
- 6.Noise level testing standard is GB/T19232-200 <FAN COIL UNITS>.
- 7.The pipe connecting directions can be changed during the installation. And the cooling and heating capacity must multiply 0.94.

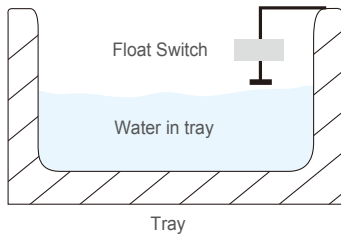


Features:

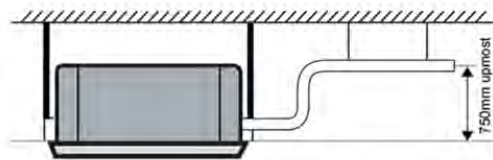
Remote controller is standard. Wired controller is optional.



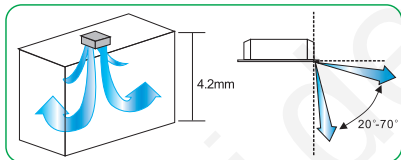
Float switch inside to prevent from leaking



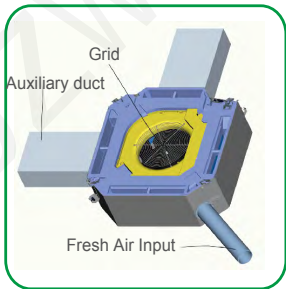
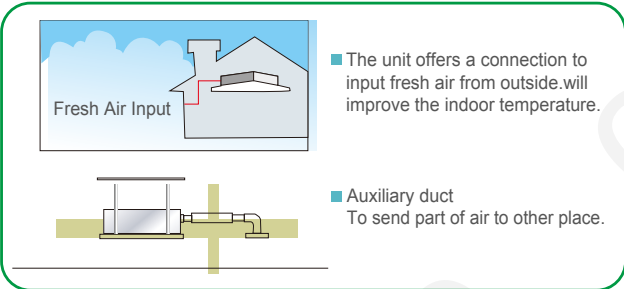
High lift water drain pump (750mm),easy to plan the condensate drain pipe



4-way air flowing, which can uniform temperature distribution in the roof.



Fresh air can be inputed from outside



3 rows 2 pipes system

| Model                         |                   | FP**KM-3 | 200                                          | 300    | 400    | 450    | 500         |      |
|-------------------------------|-------------------|----------|----------------------------------------------|--------|--------|--------|-------------|------|
| Air flow                      | H                 | m3/h     | 340                                          | 510    | 680    | 800    | 850         |      |
|                               | M                 | m3/h     | 290                                          | 400    | 540    | 650    | 700         |      |
|                               | L                 | m3/h     | 200                                          | 290    | 400    | 500    | 550         |      |
| Static pressure               |                   | Pa       | 0                                            | 0      | 0      | 0      | 0           |      |
| Cooling capacity              | H                 | total    | W                                            | 1800   | 2700   | 3600   | 4200        | 4500 |
|                               |                   | sensible | W                                            | 1365   | 2100   | 2790   | 3200        | 3365 |
|                               | M                 | total    | W                                            | 1555   | 2341   | 3080   | 3570        | 3811 |
|                               |                   | sensible | W                                            | 1092   | 1680   | 2186   | 2500        | 2604 |
|                               | L                 | total    | W                                            | 1367   | 2059   | 2700   | 3201        | 3362 |
|                               |                   | sensible | W                                            | 883    | 1316   | 1743   | 2055        | 2117 |
| Heating capacity              | H                 | W        | 2700                                         | 4050   | 5400   | 6350   | 6750        |      |
|                               | M                 | W        | 2187                                         | 3210   | 4375   | 5108   | 5435        |      |
|                               | L                 | W        | 1896                                         | 2812   | 3751   | 4396   | 4673        |      |
| Power supply                  |                   | V/PH/Hz  | 220V/1PH/50Hz                                |        |        |        |             |      |
| Noise level                   | H<br>(high speed) | dB(A)    | ≤37                                          | ≤39    | ≤41    | ≤42    | ≤43         |      |
| Input power                   |                   | W        | 37                                           | 52     | 62     | 65     | 76          |      |
| Water flow                    |                   | m3/h     | 0.31                                         | 0.46   | 0.62   | 0.73   | 0.77        |      |
| Water pressure drop           |                   | kPa      | 11.8                                         | 12.9   | 22.1   | 24.3   | 18.2        |      |
| Water tube connection(inlet)  |                   |          | ZG3/4"                                       | ZG3/4" | ZG3/4" | ZG3/4" | ZG3/4"      |      |
| Water tube connection(outlet) |                   |          | ZG3/4"                                       | ZG3/4" | ZG3/4" | ZG3/4" | ZG3/4"      |      |
| Coil type                     |                   |          | Hydrophilic aluminum fin to wear copper tube |        |        |        |             |      |
| Max working pressure          |                   | Mpa      | 1.6                                          | 1.6    | 1.6    | 1.6    | 1.6         |      |
| Condensing water pipe         |                   | mm       | φ26                                          | φ26    | φ26    | φ26    | φ26         |      |
| Unit net dimension            | Unit(LxWxH)       | mm       | 570x570x290                                  |        |        |        | 730x730x290 |      |
|                               | Panel(LxWxH)      | mm       | 650x650x45                                   |        |        |        | 850x850x45  |      |
| Unit net weight               | Unit              | kg       | 21                                           | 21     | 23     | 24     | 27          |      |
|                               | Panel             | kg       | 3                                            |        |        |        | 6           |      |

3 rows 2 pipes system

| Model                         |                   | FP**KM-3 |         | 600                                          | 800    | 1000   | 1200         | 1400   |
|-------------------------------|-------------------|----------|---------|----------------------------------------------|--------|--------|--------------|--------|
| Air flow                      |                   | H        | m3/h    | 1020                                         | 1360   | 1700   | 2040         | 2380   |
|                               |                   | M        | m3/h    | 850                                          | 1110   | 1400   | 1670         | 1950   |
|                               |                   | L        | m3/h    | 680                                          | 860    | 1100   | 1300         | 1520   |
| Static pressure               |                   |          | Pa      | 0                                            | 0      | 0      | 0            | 0      |
| Cooling capacity              | H                 | total    | W       | 5400                                         | 7200   | 9000   | 10800        | 12600  |
|                               |                   | sensible | W       | 4085                                         | 5702   | 6780   | 8240         | 9329   |
|                               | M                 | total    | W       | 4510                                         | 6187   | 7600   | 9221         | 10513  |
|                               |                   | sensible | W       | 3130                                         | 4300   | 5301   | 6490         | 7300   |
|                               | L                 | total    | W       | 4040                                         | 5515   | 6733   | 8230         | 9390   |
|                               |                   | sensible | W       | 2532                                         | 3485   | 4314   | 5314         | 5857   |
| Heating capacity              |                   | H        | W       | 8100                                         | 10800  | 13500  | 16200        | 18900  |
|                               |                   | M        | W       | 6550                                         | 8691   | 11000  | 13259        | 15300  |
|                               |                   | L        | W       | 5570                                         | 7413   | 9319   | 11312        | 12890  |
| Pow er supply                 |                   |          | V/PH/Hz | 220V/1PH/50Hz                                |        |        |              |        |
| Noise level                   | H<br>(high speed) |          | dB(A)   | ≤45                                          | ≤46    | ≤48    | ≤50          | ≤51    |
| Input pow er                  |                   |          | W       | 96                                           | 134    | 152    | 189          | 228    |
| Water flow                    |                   |          | m3/h    | 0.93                                         | 1.23   | 1.54   | 1.85         | 2.16   |
| Water pressure drop           |                   |          | kPa     | 26.8                                         | 28.4   | 33.2   | 35.9         | 38.4   |
| Water tube connection(inlet)  |                   |          |         | ZG3/4"                                       | ZG3/4" | ZG3/4" | ZG3/4"       | ZG3/4" |
| Water tube connection(outlet) |                   |          |         | ZG3/4"                                       | ZG3/4" | ZG3/4" | ZG3/4"       | ZG3/4" |
| Coil type                     |                   |          |         | Hydrophilic aluminum fin to wear copper tube |        |        |              |        |
| Max w orking pressure         |                   |          | Mpa     | 1.6                                          | 1.6    | 1.6    | 1.6          | 1.6    |
| Condensing w ater pipe        |                   |          | mm      | φ26                                          | φ26    | φ26    | φ26          | φ26    |
| Unit net dimension            | Unit(LxWxH)       |          | mm      | 730x730x290                                  |        |        | 930x930x290  |        |
|                               | Panel(LxWxH)      |          | mm      | 850x850x45                                   |        |        | 1050x1050x45 |        |
| Unit net w eight              | Unit              |          | kg      | 28                                           | 28     | 31     | 32           | 33     |
|                               | Panel             |          | kg      | 6                                            |        |        | 9            |        |

3+1 rows 4 pipes system

| Model                         |                   | FP**KM-4 |                                              | 200           | 300          | 400          | 450          | 500         |
|-------------------------------|-------------------|----------|----------------------------------------------|---------------|--------------|--------------|--------------|-------------|
| Air flow                      | H                 | m3/h     | 340                                          | 510           | 680          | 800          | 850          |             |
|                               | M                 | m3/h     | 290                                          | 400           | 540          | 650          | 700          |             |
|                               | L                 | m3/h     | 200                                          | 290           | 400          | 500          | 550          |             |
| Static pressure               |                   |          | Pa                                           | 0             | 0            | 0            | 0            | 0           |
| Cooling capacity              | H                 | total    | W                                            | 1400          | 2100         | 2800         | 3250         | 3500        |
|                               |                   | sensible | W                                            | 1050          | 1570         | 2098         | 2448         | 2650        |
|                               | M                 | total    | W                                            | 1200          | 1793         | 2342         | 2794         | 2898        |
|                               |                   | sensible | W                                            | 850           | 1262         | 1619         | 1976         | 2100        |
|                               | L                 | total    | W                                            | 1060          | 1571         | 2110         | 2467         | 2612        |
|                               |                   | sensible | W                                            | 675           | 1000         | 1340         | 1580         | 1643        |
| Heating capacity              | H                 | W        | 1080                                         | 1620          | 2160         | 2460         | 2700         |             |
|                               | M                 | W        | 870                                          | 1310          | 1762         | 2000         | 2160         |             |
|                               | L                 | W        | 752                                          | 1102          | 1497         | 1700         | 1845         |             |
| Power supply                  |                   |          | V/PH/Hz                                      | 220V/1PH/50Hz |              |              |              |             |
| Noise level                   | H<br>(high speed) | dB(A)    | ≤37                                          | ≤39           | ≤41          | ≤42          | ≤43          |             |
| Input power                   |                   | W        | 37                                           | 52            | 62           | 65           | 76           |             |
| Water flow                    |                   | m3/h     | 0.24<br>0.09                                 | 0.36<br>0.14  | 0.48<br>0.18 | 0.56<br>0.21 | 0.60<br>0.23 |             |
| Water pressure drop           |                   | Cooling  | kPa                                          | 8.22          | 8.54         | 12.88        | 13.54        | 16.45       |
|                               |                   | Heating  |                                              | 3.51          | 3.84         | 6.31         | 7.02         | 7.37        |
| Water tube connection(inlet)  |                   |          | cooling/heating                              | ZG3/4"        | ZG3/4"       | ZG3/4"       | ZG3/4"       | ZG3/4"      |
| Water tube connection(outlet) |                   |          | coil                                         | ZG3/4"        | ZG3/4"       | ZG3/4"       | ZG3/4"       | ZG3/4"      |
| Coil type                     |                   |          | Hydrophilic aluminum fin to wear copper tube |               |              |              |              |             |
| Max working pressure          |                   |          | Mpa                                          | 1.6           | 1.6          | 1.6          | 1.6          | 1.6         |
| Condensing water pipe         |                   |          | mm                                           | φ26           | φ26          | φ26          | φ26          | φ26         |
| Unit net dimension            | Unit(LxWxH)       |          | mm                                           | 570x570x290   |              |              |              | 840x840x240 |
|                               | Panel(LxWxH)      |          | mm                                           | 650x650x45    |              |              |              | 950x950x45  |
| Unit net weight               | Unit              |          | kg                                           | 22            | 22           | 24           | 25           | 28          |
|                               | Panel             |          | kg                                           | 3             |              |              |              | 6           |

3+1 rows 4 pipes system

| Model                         |                   |          | FP**KM-4                                     | 600           | 800          | 1000         | 1200         | 1400         |
|-------------------------------|-------------------|----------|----------------------------------------------|---------------|--------------|--------------|--------------|--------------|
| Air flow                      | H                 |          | m3/h                                         | 1020          | 1360         | 1700         | 2040         | 2380         |
|                               | M                 |          | m3/h                                         | 850           | 1110         | 1400         | 1670         | 1950         |
|                               | L                 |          | m3/h                                         | 680           | 860          | 1100         | 1300         | 1520         |
| Static pressure               |                   |          | Pa                                           | 0             | 0            | 0            | 0            | 0            |
| Cooling capacity              | H                 | total    | W                                            | 4200          | 5600         | 7000         | 8400         | 9850         |
|                               |                   | sensible | W                                            | 3217          | 4200         | 5250         | 6300         | 7350         |
|                               | M                 | total    | W                                            | 3570          | 4760         | 5950         | 7140         | 8355         |
|                               |                   | sensible | W                                            | 2499          | 3332         | 4165         | 4998         | 5850         |
|                               | L                 | total    | W                                            | 3150          | 4200         | 5250         | 6300         | 7347         |
|                               |                   | sensible | W                                            | 1998          | 2667         | 3333         | 4009         | 4663         |
| Heating capacity              | H                 |          | W                                            | 3240          | 4320         | 5400         | 6480         | 7200         |
|                               | M                 |          | W                                            | 2620          | 3489         | 4374         | 5251         | 5832         |
|                               | L                 |          | W                                            | 2233          | 2978         | 3726         | 4453         | 4968         |
| Power supply                  |                   |          | V/PH/Hz                                      | 220V/1PH/50Hz |              |              |              |              |
| Noise level                   | H<br>(high speed) |          | dB(A)                                        | ≤45           | ≤46          | ≤48          | ≤50          | ≤52          |
| Input power                   |                   |          | W                                            | 96            | 134          | 152          | 189          | 228          |
| Water flow                    |                   |          | m3/h                                         | 0.72<br>0.27  | 0.96<br>0.36 | 1.21<br>0.45 | 1.45<br>0.54 | 1.70<br>0.60 |
| Water pressure drop           |                   | Cooling  | kPa                                          | 21.07         | 22.15        | 25.32        | 26.67        | 29.44        |
|                               |                   | Heating  |                                              | 8.26          | 8.56         | 10.87        | 11.65        | 12.31        |
| Water tube connection(inlet)  |                   |          | cooling/heating                              | ZG3/4"        | ZG3/4"       | ZG3/4"       | ZG3/4"       | ZG3/4"       |
| Water tube connection(outlet) |                   |          | coil                                         | ZG3/4"        | ZG3/4"       | ZG3/4"       | ZG3/4"       | ZG3/4"       |
| Coil type                     |                   |          | Hydrophilic aluminum fin to wear copper tube |               |              |              |              |              |
| Max working pressure          |                   |          | Mpa                                          | 1.6           | 1.6          | 1.6          | 1.6          | 1.6          |
| Condensing water pipe         |                   |          | mm                                           | φ26           | φ26          | φ26          | φ26          | φ26          |
| Unit net dimension            | Unit(LxWxH)       |          | mm                                           | 840x840x240   |              | 840x840x285  |              | 960x960x290  |
|                               | Panel(LxWxH)      |          | mm                                           | 950x950x45    |              |              |              | 1140x1140x45 |
| Unit net weight               | Unit              |          | kg                                           | 29            | 29           | 33           |              | 34           |
|                               | Panel             |          | kg                                           | 6             |              | 9            |              |              |



2 pipes system

| Model                         |                   |          | 1000                                         | 1200   | 1400   | 2000         | 2400   | 2800   |       |
|-------------------------------|-------------------|----------|----------------------------------------------|--------|--------|--------------|--------|--------|-------|
| Air flow                      | H                 | m3/h     | 1700                                         | 2040   | 2380   | 3400         | 4080   | 4760   |       |
|                               | M                 | m3/h     | 1280                                         | 1550   | 1800   | 2560         | 3100   | 3600   |       |
|                               | L                 | m3/h     | 860                                          | 1050   | 1280   | 1720         | 2100   | 2560   |       |
| Static pressure               |                   | Pa       | 120                                          | 120    | 120    | 200          | 250    | 300    |       |
| Cooling capacity              | H                 | total    | W                                            | 9000   | 10800  | 12600        | 18000  | 21600  | 25200 |
|                               |                   | sensible | W                                            | 6750   | 8046   | 9387         | 13410  | 16092  | 18774 |
|                               | M                 | total    | W                                            | 7290   | 8748   | 10206        | 14580  | 17496  | 20412 |
|                               |                   | sensible | W                                            | 5759   | 6911   | 8063         | 11518  | 13822  | 16125 |
|                               | L                 | total    | W                                            | 5670   | 6804   | 7938         | 11340  | 13608  | 15876 |
|                               |                   | sensible | W                                            | 4649   | 5579   | 6509         | 9299   | 11159  | 13018 |
| Heating capacity              | H                 | W        | 13500                                        | 16200  | 18900  | 27000        | 32400  | 37800  |       |
|                               | M                 | W        | 10395                                        | 12474  | 14553  | 20790        | 24948  | 29106  |       |
|                               | L                 | W        | 8168                                         | 9801   | 11435  | 16335        | 19602  | 22869  |       |
| Power supply                  |                   | V/PH/Hz  | 220V/1PH/50Hz                                |        |        |              |        |        |       |
| Noise level                   | H<br>(high speed) | dB(A)    | ≤50                                          | ≤52    | ≤54    | ≤56          | ≤58    | ≤60    |       |
| Input power                   |                   | W        | 420                                          | 450    | 520    | 900          | 1100   | 1150   |       |
| Water flow                    |                   | m3/h     | 1.54                                         | 1.85   | 2.16   | 3.08         | 3.70   | 4.32   |       |
| Water pressure drop           |                   | kPa      | 22                                           | 30     | 36     | 40           | 56     | 68     |       |
| Water tube connection(inlet)  |                   |          | ZG7/4"                                       | ZG7/4" | ZG7/4" | ZG7/4"       | ZG7/4" | ZG7/4" |       |
| Water tube connection(outlet) |                   |          | ZG7/4"                                       | ZG7/4" | ZG7/4" | ZG7/4"       | ZG7/4" | ZG7/4" |       |
| Coil type                     |                   |          | Hydrophilic aluminum fin to wear copper tube |        |        |              |        |        |       |
| Max working pressure          |                   | Mpa      | 1.6                                          | 1.6    | 1.6    | 1.6          | 1.6    | 1.6    |       |
| Condensing water pipe         |                   | mm       | DN20(External thread)                        |        |        |              |        |        |       |
| Unit dimension                | LxWxH             | mm       | 1110x740x370                                 |        |        | 1440x770x538 |        |        |       |
| Net weight                    |                   | kg       | 57                                           | 58     | 68     | 91           | 102    | 110    |       |

- 1.The motor input power means the whole unit motor input power.
- 2.Design and test according to the GB/T19232-2003<FAN COIL UNITS>.We supply the non-standard product upon customer's request.
- 3.Standard cooling cap.was tested and carried out in environment of EAT27°C DB / 19.5 °C WB, EWT7°C , LWT12°C .
- 4.Standard heating cap.was tested and carried out in environment of 21°C DB, EWT60°C .
- 5.Water volume is equal to that in cooling running.
- 6.Noise level testing standard is GB/T19232-200 <FAN COIL UNITS>.
- 7.The pipe connecting directions can be changed during the installation. And the cooling and heating capacity must multiply 0.94.



4 pipes system

| Model                         |                   |          | 1000    | 1200                                         | 1400   | 2000   | 2400         | 2800   |        |
|-------------------------------|-------------------|----------|---------|----------------------------------------------|--------|--------|--------------|--------|--------|
| Air flow                      | H                 |          | m3/h    | 1700                                         | 2040   | 2380   | 3400         | 4080   | 4760   |
|                               | M                 |          | m3/h    | 1280                                         | 1550   | 1800   | 2560         | 3100   | 3600   |
|                               | L                 |          | m3/h    | 860                                          | 1050   | 1280   | 1720         | 2100   | 2560   |
| Static pressure               |                   |          | Pa      | 120                                          | 120    | 120    | 200          | 250    | 300    |
| Cooling capacity              | H                 | total    | W       | 9000                                         | 10800  | 12600  | 18000        | 21600  | 25200  |
|                               |                   | sensible | W       | 6750                                         | 8046   | 9387   | 13410        | 16092  | 18774  |
|                               | M                 | total    | W       | 7290                                         | 8748   | 10206  | 14580        | 17496  | 20412  |
|                               |                   | sensible | W       | 5759                                         | 6911   | 8063   | 11518        | 13822  | 16125  |
|                               | L                 | total    | W       | 5670                                         | 6804   | 7938   | 11340        | 13608  | 15876  |
|                               |                   | sensible | W       | 4649                                         | 5579   | 6509   | 9299         | 11159  | 13018  |
| Heating capacity              | H                 |          | W       | 6500                                         | 7800   | 9100   | 13000        | 15600  | 18100  |
|                               | M                 |          | W       | 5090                                         | 6110   | 7130   | 10190        | 12220  | 14260  |
|                               | L                 |          | W       | 4080                                         | 4900   | 5720   | 8170         | 9800   | 11430  |
| Power supply                  |                   |          | V/PH/Hz | 220V/1PH/50Hz                                |        |        |              |        |        |
| Noise level                   | H<br>(high speed) |          | dB(A)   | ≤50                                          | ≤52    | ≤54    | ≤56          | ≤58    | ≤60    |
| Input power                   |                   |          | W       | 420                                          | 450    | 520    | 900          | 1100   | 1150   |
| Water flow                    | H<br>(high speed) | cooling  | m3/h    | 1.54                                         | 1.85   | 2.16   | 3.08         | 3.70   | 4.32   |
|                               |                   | heating  |         | 0.56                                         | 0.68   | 0.79   | 1.13         | 1.35   | 1.57   |
| Water pressure drop           |                   | cooling  | kPa     | 22                                           | 30     | 36     | 40           | 56     | 68     |
|                               |                   | heating  |         | 9                                            | 12     | 15     | 16           | 22     | 26     |
| Water tube connection(inlet)  |                   |          |         | ZG7/4"                                       | ZG7/4" | ZG7/4" | ZG7/4"       | ZG7/4" | ZG7/4" |
| Water tube connection(outlet) |                   |          |         | ZG7/4"                                       | ZG7/4" | ZG7/4" | ZG7/4"       | ZG7/4" | ZG7/4" |
| Coil type                     |                   |          |         | Hydrophilic aluminum fin to wear copper tube |        |        |              |        |        |
| Max working pressure          |                   |          | Mpa     | 1.6                                          | 1.6    | 1.6    | 1.6          | 1.6    | 1.6    |
| Condensing water pipe         |                   |          | mm      | DN20(External thread)                        |        |        |              |        |        |
| Unit dimension                |                   | LxWxH    | mm      | 1110x740x370                                 |        |        | 1440x770x538 |        |        |
| Net weight                    |                   |          | kg      | 57                                           | 58     | 68     | 91           | 102    | 110    |

- 1.The motor input power means the whole unit motor input power.
- 2.Design and test according to the GB/T19232-2003<FAN COIL UNITS>.We supply the non-standard product upon customer's request.
- 3.Standard cooling cap.was tested and carried out in environment of EAT27°C DB / 19.5 °C WB, EWT7°C , LWT12°C .
- 4.Standard heating cap.was tested and carried out in environment of 21°C DB, EWT60°C .
- 5.Water volume is equal to that in cooling running.
- 6.Noise level testing standard is GB/T19232-200 <FAN COIL UNITS>.
- 7.The pipe connecting directions can be changed during the installation. And the cooling and heating capacity must multiply 0.94.



SR04 Motorized Valve

| Model                  |                    | Type  | Size | Kv  | Closing-off pressure (MPa) |
|------------------------|--------------------|-------|------|-----|----------------------------|
| A type(non-detachable) | B type(detachable) |       |      |     |                            |
| SR04GC21520A4          | SR04GC21520B4      | 2-way | DN15 | 2.0 | 0.20                       |
| SR04GC21532A4          | SR04GC21532B4      | 2-way | DN15 | 3.2 | 0.15                       |
| SR04GB31543A4          | SR04GB31543B4      | 3-way | DN15 | 4.3 | 0.10                       |
| SR04GC22020A4          | SR04GC22020B4      | 2-way | DN20 | 2.0 | 0.20                       |
| SR04GC22032A4          | SR04GC22032B4      | 2-way | DN20 | 3.2 | 0.15                       |
| SR04GB32046A4          | SR04GB32046B4      | 3-way | DN20 | 4.6 | 0.10                       |
| SR04GC22557A4          | SR04GC22557B4      | 2-way | DN25 | 5.7 | 0.10                       |
| SR04GB32557A4          | SR04GB32557B4      | 3-way | DN25 | 5.7 | 0.10                       |



DN15--DN25 Modulating Motorized Ball Valve

| Valve Model    | Size | Kv   | Actuator | Model          | SBA03-220                          | SBA03-024E |
|----------------|------|------|----------|----------------|------------------------------------|------------|
| SBV02G2*15040S | DN15 | 4.0  |          | Power supply   | 220VAC                             | 24VAC      |
| SBV02G2*20063S | DN20 | 6.3  |          | Signal         | Three point floating /on-off 0~10v |            |
| SBV02G2*25100S | DN25 | 10.0 |          | Operation time | 45s (50Hz/90°)                     |            |

Electronic Thermostat Series

| SRT04E | SRT025E | SRE05 | SRE06 | SRE07 |
|--------|---------|-------|-------|-------|
|        |         |       |       |       |

Mechanical Thermostat Series

| SRT022YJ | SRT04T | SRT03T |  | SRT03YJ |
|----------|--------|--------|--|---------|
|          |        |        |  |         |



Combo type sanitary hot water Heat Pump paramaters

| Model                                 |                   |         | RSJ-15/190RDN3-C                   |                             |          | RSJ-35/300RDN3-E1                  |        |          |
|---------------------------------------|-------------------|---------|------------------------------------|-----------------------------|----------|------------------------------------|--------|----------|
| Power supply                          |                   | V/Ph/Hz | 220-240/1/50                       |                             |          | 220-240/1/50                       |        |          |
| Running mode                          |                   |         | Economy                            | Hybrid                      | E-heater | Economy                            | Hybrid | E-heater |
| Running ambient temperature           |                   | ℃       | 5~43                               | -20~43                      | -20~43   | -7~43                              | -20~43 | -20~43   |
| Output water temperature              |                   | ℃       | Default 60℃, 38℃~70℃               |                             |          | Default 55,38~65                   |        |          |
| Storage size                          |                   | Ltr     | 190                                |                             |          | 300                                |        |          |
| Capacity1                             |                   | kW      | 1.5                                | Heat pump:1.50E-heater:2.15 | 2.15     | 3.00                               | 3.00   | 3.00     |
| COP                                   |                   |         | 3.5                                | Heat pump:3.50E-heater:1.00 | 1.0      | 3.76                               | 3.76   | 1.00     |
| Max. current                          |                   | A       | 2.3                                | 12.1                        | 9.3      | 6.5                                | 18.7   | 13.0     |
| Water heating energy efficiency class |                   |         | A                                  |                             |          | A                                  |        |          |
| Dimension (D×H)                       |                   | mm      | φ568×1,580                         |                             |          | φ650×1,920                         |        |          |
| Packing (W×H×D)                       |                   | mm      | 730×1,660×700                      |                             |          | 750×2,150×780                      |        |          |
| Net/gross weight                      |                   | kg      | 90/101                             |                             |          | 145.5/175.5                        |        |          |
| Sound pressure level2                 |                   | dB(A)   | 48                                 |                             |          | 45                                 |        |          |
| Sound power level                     |                   | dB(A)   | 58                                 |                             |          | 56                                 |        |          |
| Compressor                            | Type              |         | Rotary                             |                             |          | Rotary                             |        |          |
| Fan motor                             | Type              |         | AC Motor                           |                             |          | AC Motor                           |        |          |
| Air side heat exchanger               | Type              |         | Fin-coil                           |                             |          | Fin-coil                           |        |          |
| Water side heat exchanger             |                   | Type    | Dividing w all type heat exchanger |                             |          | Dividing w all type heat exchanger |        |          |
| Refrigerant                           | Type/Quantity     | kg      | R134a/0.8                          |                             |          | R134a/1.2                          |        |          |
|                                       | Throttle type     |         | Electric expansion valve           |                             |          | Electric expansion valve           |        |          |
| Water pipe line                       | Water inlet pipe  | mm      | DN20                               |                             |          | DN20                               |        |          |
|                                       | Water outlet pipe | mm      | DN20                               |                             |          | DN20                               |        |          |
|                                       | Drainage pipe     | mm      | DN20                               |                             |          | DN20                               |        |          |
|                                       | PTR valve joint   | mm      | DN20                               |                             |          | DN20                               |        |          |
| E-heater                              |                   | kW      | 2                                  |                             |          | 3                                  |        |          |
| Hot water yield                       |                   | m³/h    | 0.043                              | 0.053                       | 0.062    | 0.086                              |        |          |
| Applicable persons                    |                   |         | 3~4                                |                             |          | 5~6                                |        |          |



Swimming Pool Heat Pump paramaters

| Model                          |                          |         | LRSJ-60/NYN1-A1         | LRSJ-80/NYN1-A1 | LRSJ-120/NYN1-A1 | LRSJ-140/NYN1-A1 |
|--------------------------------|--------------------------|---------|-------------------------|-----------------|------------------|------------------|
| Power supply                   |                          | V/Ph/Hz | 220-240/1/50            |                 |                  |                  |
| Heating                        | Capacity                 | kW      | 6.0                     | 8.0             | 11.7             | 13.6             |
|                                | Input                    | kW      | 1.150                   | 1.518           | 2.350            | 2.550            |
|                                | COP                      |         | 5.22                    | 5.27            | 4.98             | 5.33             |
|                                | Ambient temperature      | °C      | -7~38                   | -7~38           | -7~38            | -7~38            |
|                                | Output water temperature | °C      | Default 28°C, 20°C~35°C |                 |                  |                  |
| Cooling                        | Capacity                 | kW      | 4.00                    | 5.80            | 8.25             | 10.35            |
|                                | Input                    | kW      | 1.25                    | 1.50            | 2.50             | 2.90             |
|                                | EER                      |         | 3.20                    | 3.87            | 3.30             | 3.57             |
|                                | Ambient temperature      | °C      | 15~43                   | 15~43           | 15~43            | 15~43            |
|                                | Output water temperature | °C      | Default 28°C, 10°C~30°C |                 |                  |                  |
| Max. current                   |                          | A       | 6.3                     | 8.0             | 13.7             | 16.0             |
| Dimension (W×H×D)              |                          | mm      | 1,015×705×385           | 1,015×705×385   | 1,050×855×315    | 1,050×855×315    |
| Packing (W×H×D)                |                          | mm      | 1,095×840×445           | 1,095×840×445   | 1,160×980×410    | 1,160×980×410    |
| Net/Gross weight               |                          | kg      | 58.5/67.5               | 66/75           | 75/85            | 75/85            |
| Outdoor noise level            |                          | dB(A)   | 58                      | 58              | 58               | 58               |
| Compressor type                |                          |         | Rotary                  | Rotary          | Rotary           | Rotary           |
| Fan motor type                 |                          |         | AC motor                | AC motor        | AC motor         | AC motor         |
| Water side heat exchanger type |                          |         | Titanium-tube           | Titanium-tube   | Titanium-tube    | Titanium-tube    |
| Air side heat exchanger type   |                          |         | Fin-coil                | Fin-coil        | Fin-coil         | Fin-coil         |
| Refrigerant                    | Type/Quantity            | kg      | R410A/1.0               | R410A/1.25      | R410A/1.6        | R410A/1.85       |
|                                | Throttle type            |         | Capillary               | Capillary       | Capillary        | Capillary        |
| Water pipe line                | Water inlet pipe         | mm      | φ50                     | φ50             | φ50              | φ50              |
|                                | Water outlet pipe        | mm      | φ50                     | φ50             | φ50              | φ50              |
|                                | Drainage pipe            | mm      | φ25                     | φ25             | φ25              | φ25              |
| Wire controller                |                          |         | KJRH-90B/E              | KJRH-90B/E      | KJRH-90B/E       | KJRH-90B/E       |
| Applicable range               |                          | m3      | 20                      | 25              | 40               | 45~50            |

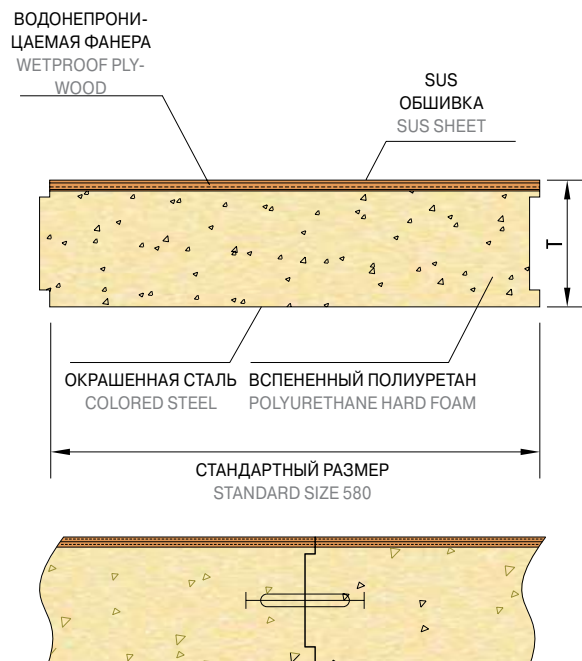
## 5.СУДОВЫЕ ХОЛОДИЛЬНЫЕ КАМЕРЫ.



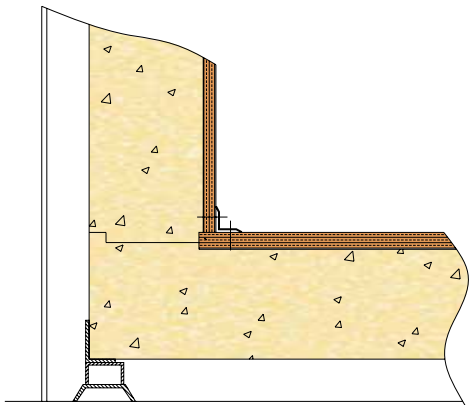


# Панели для холодильной камеры.

| Название<br>NAME        | Состав материала<br>MATERIAL COMPOSITION                                                                                                                                                                                                                                                                                                                                  | Стандартный размер<br>STANDARD SIZE        | Толщина<br>THICKNESS | Нагрузка<br>WEIGHT   |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------|----------------------|
| Стена<br>WALL           | Покрытие: 0,7 мм SUS 304<br>Подложка: 9 мм водонепроницаемая фанера<br>Основной материал: огнеупорный вспененный полиуретан<br>Внутренняя пластина: окрашенная сталь 0,7 мм<br>Surface plate : 0.7 mm SUS 304<br>Underlay plate: 9 mm wetproof plywood<br>Core material: fire retardant polyurethane hard foam<br>Back plate: colored steel plate 0.7 mm                  | Длина x Ширина<br>L x B<br><br>2 440 x 580 | T=80 mm              | 23 kg/m <sup>2</sup> |
| Потолок<br>CEILING      |                                                                                                                                                                                                                                                                                                                                                                           |                                            | T=100 mm             | 24 kg/m <sup>2</sup> |
|                         |                                                                                                                                                                                                                                                                                                                                                                           |                                            | T=120 mm             | 25 kg/m <sup>2</sup> |
|                         |                                                                                                                                                                                                                                                                                                                                                                           |                                            | T=150 mm             | 26 kg/m <sup>2</sup> |
| Пол<br>FLOOR            | Покрытие: 1,2 мм SUS 304<br>Подложка: 15 мм водонепроницаемая фанера<br>Основной материал: огнеупорный вспененный полиуретан<br>Внутренняя пластина: окрашенная сталь 0,7 мм<br>Surface plate: 1.2 mm SUS 304 (antislip)<br>Underlay plate: 15mm wetproof plywood<br>Core material: fire retardant polyurethane hard foam<br>Back plate: colored sheet plate 0.7 mm       | Длина x Ширина<br>L x B<br><br>2 440 x 580 | T=120 mm             | 31 kg/m <sup>2</sup> |
|                         |                                                                                                                                                                                                                                                                                                                                                                           |                                            | T=150 mm             | 32 kg/m <sup>2</sup> |
| Автономная<br>переборка | Покрытие: 0,7 мм SUS 304<br>Подложка: 9 мм водонепроницаемая фанера<br>Основной материал: огнеупорный вспененный полиуретан<br>Внутренняя пластина: 0,7 мм SUS 304<br>Surface plate: 0.7mm SUS304<br>Underlay plate: 9 mm wetproof plywood<br>Core material: fire retardant polyurethane hard foam<br>Underlay plate: 9 mm wetproof plywood<br>Back plate: 0.7 mm SUS 304 | Длина x Ширина<br>L x B<br><br>2 440 x 580 | T=80 mm              | 31 kg/m <sup>2</sup> |
|                         |                                                                                                                                                                                                                                                                                                                                                                           |                                            | T=100 mm             | 32 kg/m <sup>2</sup> |
|                         |                                                                                                                                                                                                                                                                                                                                                                           |                                            | T=120 mm             | 33 kg/m <sup>2</sup> |
|                         |                                                                                                                                                                                                                                                                                                                                                                           |                                            | T=150 mm             | 34 kg/m <sup>2</sup> |



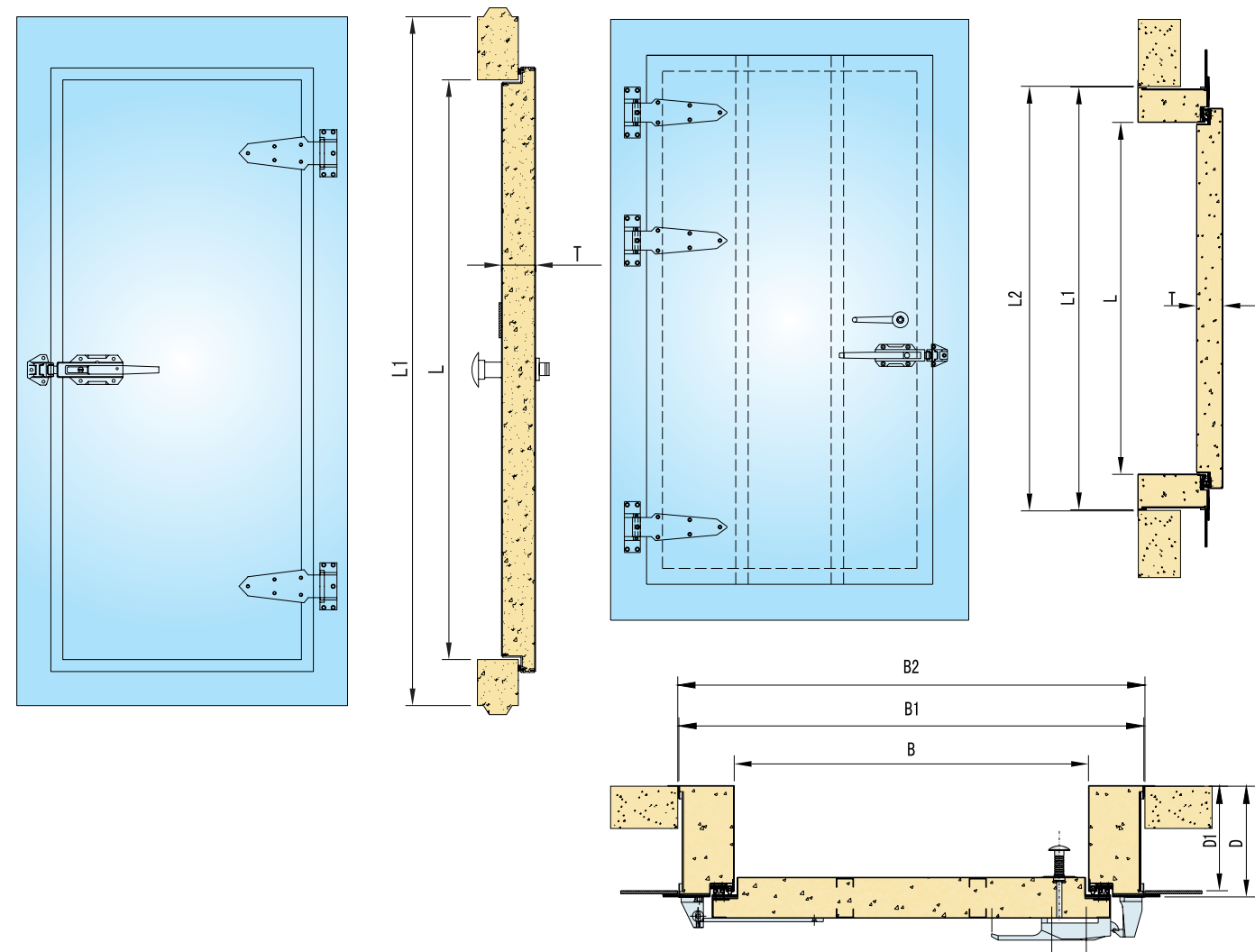
## СХЕМА УСТАНОВКИ INSTALLATION DETAILS



# 5.СУДОВЫЕ ХОЛОДИЛЬНЫЕ КАМЕРЫ.

## Дверь для холодильной камеры

А-60 дверь для холодильной камеры



| Размер дверного проема<br>DOORWAY SIZE<br>L x B | Размер рамы<br>FRAME SIZE<br>L1 x B1 | Размер выреза в стене<br>WALL CUT SIZE<br>L2 x B2 | Глубина дверной рамы<br>DOOR FRAME DEPTH<br>D | Дверное полотно<br>DOOR LEAF THI.<br>T | Направление<br>открытия двери<br>OPENING DIRECTION | Масса<br>WEIGHT<br>kg |
|-------------------------------------------------|--------------------------------------|---------------------------------------------------|-----------------------------------------------|----------------------------------------|----------------------------------------------------|-----------------------|
| 1 650 x 600 mm                                  | 1 900 x 850 mm                       | 1 905 x 855 mm                                    | D=D1+15 mm<br>D1<br>D1 LINER DEPTH            | T=100 mm                               | Левое<br>LEFT-OUT                                  | 132.4                 |
| 1 650 x 700 mm                                  | 1 900 x 950 mm                       | 1 905 x 955 mm                                    |                                               |                                        | Правое<br>RIGHT-OUT                                | 138.5                 |
| 1 700 x 700 mm                                  | 1 950 x 950 mm                       | 1 955 x 955 mm                                    |                                               |                                        |                                                    | 142.1                 |

# Стеллажи для холодильной камеры (нержавеющая сталь)

Стеллажи с двумя или тремя уровнями в основном делаются из нержавеющей стальных труб и пластин. Основание стеллажа прикрепляется к полу, а верхняя часть к потолку, при необходимости, стеллаж крепится к стене.

| Название детали<br>COMPONENT NAME | Материал<br>MATERIAL                 | Форма и размер<br>SIZE OR SPE.                                                                                                                                                                                                                                                               | Примечание<br>REMARK                                                                                                                                      |
|-----------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Стойка<br>STANCHION               | Нержавеющая сталь<br>STAINLESS STEEL |  30 x 30 x 1.5  25 X 38 x 1.5                                                                                              | Исходя из различных требований, клиент может выбрать подходящий стеллаж<br><br>CONFORMING TO DIFFERENT REQUESTMENT, CUSTOMERS CAN CHOOSE RELEVANT SHELVES |
| Несущая балка<br>CARRYING BEAM    | Нержавеющая сталь<br>STAINLESS STEEL |  25 x 38 x 1.5  30 x 15 x 1.5                                                                                              |                                                                                                                                                           |
| Анкер<br>STAY ROD                 | Нержавеющая сталь<br>STAINLESS STEEL |  Ø19 x 1.2  Ø16 x 1.2                                                                                                      |                                                                                                                                                           |
| Дно поддона<br>TRAY PLATE         | Нержавеющая сталь<br>STAINLESS STEEL |  PUNCHING t=1.5  Ø19 x 1.2  Ø16 x 1.2 |                                                                                                                                                           |

