



SANYS VRF

DC INVERTER
2016 CATALOGUE



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SANYS VRF 50HZ R410a

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SANYS VRF III FULL DC INVERTER VRF SYSTEM (50HZ-380-415V-3PH)

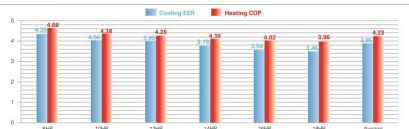
Basic Modules



- Full DC INVERTER technology
- Single Module: 8/10/12/14/16/18HP
- DC compressors and fan motors
- Max 1000m total pipe length

| | 8/10HP | 12/14/16/18HP |
|------------|----------|-------------------------|
| Capacity | 8HP 10HP | 12HP 14HP 16HP 18HP |
| Compressor | DC DC | DC DC DC DC DC DC DC DC |
| Fan motor | DC DC | DC+DC DC+DC DC+DC DC+DC |

EER & COP



IPLV(C)

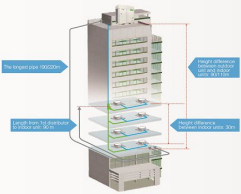


| Model Name | Basic modules | | | | | | | | | | | | | | | | 2 modules combination | | | | | | | | | | | | | | | |
|--------------------------------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------------|-------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | | | | | | | | | | | | | | |
| Max. Connected indoor units quantity | 13 | 16 | 18 | 20 | 24 | 28 | 32 | 36 | 40 | 24 | 28 | 32 | 36 | 40 | 44 | 48 | 52 | 56 | 60 | | | | | | | | | | | | | |
| Performance data | Capacity | 25.2 | 34.0 | 43.5 | 52.0 | 60.5 | 69.0 | 77.5 | 86.0 | 50.4 | 68.0 | 87.0 | 105.0 | 123.0 | 141.0 | 159.0 | 177.0 | 195.0 | 213.0 | | | | | | | | | | | | | |
| | EER | 7.1 | 7.8 | 8.5 | 9.2 | 9.9 | 10.6 | 11.3 | 11.9 | 14.1 | 15.3 | 16.5 | 17.7 | 18.9 | 20.1 | 21.3 | 22.5 | 23.7 | 24.9 | | | | | | | | | | | | | |
| | Power input | 3.5 | 4.3 | 5.1 | 5.9 | 6.7 | 7.5 | 8.3 | 9.1 | 9.9 | 19.8 | 22.4 | 25.0 | 27.6 | 30.2 | 32.8 | 35.4 | 38.0 | 40.6 | | | | | | | | | | | | | |
| | EER | 2.0 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 2.5 | 2.8 | 3.1 | 3.4 | 3.7 | 4.0 | 4.3 | 4.6 | 4.9 | | | | | | | | | | | | | |
| | Capacity | 10000 | 13000 | 16000 | 19000 | 22000 | 25000 | 28000 | 31000 | 34000 | 20000 | 26000 | 32000 | 38000 | 44000 | 50000 | 56000 | 62000 | 68000 | | | | | | | | | | | | | |
| Physical data | Quantity | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | |
| | Type | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | |
| | Volume | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 | 52 | | | | | | | | | | | | | |
| | Weight | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | |
| | Net weight | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | |

Notes: 1. Cooling operating temperature range is from 5°C to 32°C. Heating operating temperature range is from 20°C to 30°C.
 2. The cooling conditions: indoor side 27°C DB/19°C WB, 50%RH; outdoor side 35°C DB/17°C WB.
 3. The heating conditions: indoor side 20°C DB/17°C WB, 50%RH; outdoor side 7°C DB/2°C WB.
 4. Sound level measured at a point 1m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 5. The above data may be changed without notice for future improvement on quality and performance.

Long Piping & Height Difference

- The total pipe length: 1000m
- The longest pipe: 190m
- Actual length 190m
- Equivalent length 220m
- Equivalent length from first indoor distributor to last indoor unit: 90m
- Height difference between indoor and outdoor unit:
 - + Outdoor unit above +90m
 - Outdoor unit below -110m
- Height difference between indoor units: 30m



Combination Table

| Indoor Unit | Cooling Capacity (kW) | | | | | | | | | | | | | | | | Max. Connected Indoor Unit Quantity |
|-------------|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------------------------------|
| | 8HP | 10HP | 12HP | 14HP | 16HP | 18HP | 20HP | 24HP | 28HP | 32HP | 36HP | 40HP | 44HP | 48HP | 52HP | 56HP | |
| 8 | 21.2 | | | | | | | | | | | | | | | | 13 |
| 10 | 28 | | | | | | | | | | | | | | | | 16 |
| 12 | 34.0 | | | | | | | | | | | | | | | | 18 |
| 14 | 40 | | | | | | | | | | | | | | | | 20 |
| 16 | 46 | | | | | | | | | | | | | | | | 22 |
| 18 | 52 | | | | | | | | | | | | | | | | 24 |
| 20 | 58 | | | | | | | | | | | | | | | | 26 |
| 22 | 64 | | | | | | | | | | | | | | | | 28 |
| 24 | 70 | | | | | | | | | | | | | | | | 30 |
| 26 | 76 | | | | | | | | | | | | | | | | 32 |
| 28 | 82 | | | | | | | | | | | | | | | | 34 |
| 30 | 88 | | | | | | | | | | | | | | | | 36 |
| 32 | 94 | | | | | | | | | | | | | | | | 38 |
| 34 | 100 | | | | | | | | | | | | | | | | 40 |
| 36 | 106 | | | | | | | | | | | | | | | | 42 |
| 38 | 112 | | | | | | | | | | | | | | | | 44 |
| 40 | 118 | | | | | | | | | | | | | | | | 46 |
| 42 | 124 | | | | | | | | | | | | | | | | 48 |
| 44 | 130 | | | | | | | | | | | | | | | | 50 |
| 46 | 136 | | | | | | | | | | | | | | | | 52 |
| 48 | 142 | | | | | | | | | | | | | | | | 54 |
| 50 | 148 | | | | | | | | | | | | | | | | 56 |
| 52 | 154 | | | | | | | | | | | | | | | | 58 |
| 54 | 160 | | | | | | | | | | | | | | | | 60 |
| 56 | 166 | | | | | | | | | | | | | | | | 62 |
| 58 | 172 | | | | | | | | | | | | | | | | 64 |
| 60 | 178 | | | | | | | | | | | | | | | | 66 |
| 62 | 184 | | | | | | | | | | | | | | | | 68 |
| 64 | 190 | | | | | | | | | | | | | | | | 70 |
| 66 | 196 | | | | | | | | | | | | | | | | 72 |
| 68 | 202 | | | | | | | | | | | | | | | | 74 |

| Model Name | Basic modules | | | | | | | | | | | | | | | | 2 modules combination | | | | | | | | | | | | | | | |
|--------------------------------------|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------------|----------|----------|----------|--|--|--|--|--|--|--|--|--|--|--|--|
| | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | | | | | | | | | | | | | | |
| Max. Connected indoor units quantity | 42 | 42 | 42 | 42 | 48 | 48 | 54 | 54 | 60 | 54 | 58 | 64 | 64 | 64 | 64 | 64 | 64 | 64 | 64 | | | | | | | | | | | | | |
| Performance data | Capacity | 110.0 | 180.0 | 225.0 | 270.0 | 315.0 | 360.0 | 405.0 | 450.0 | 220.0 | 360.0 | 450.0 | 540.0 | 630.0 | 720.0 | 810.0 | 900.0 | 990.0 | 1080.0 | | | | | | | | | | | | | |
| | EER | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | | | | | | | | | | | |
| | Power input | 36.0 | 60.0 | 75.0 | 90.0 | 105.0 | 120.0 | 135.0 | 150.0 | 165.0 | 72.0 | 120.0 | 150.0 | 180.0 | 210.0 | 240.0 | 270.0 | 300.0 | 330.0 | | | | | | | | | | | | | |
| | EER | 2.0 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 2.5 | 2.8 | 3.1 | 3.4 | 3.7 | 4.0 | 4.3 | 4.6 | 4.9 | | | | | | | | | | | | | |
| | Capacity | 40000 | 60000 | 75000 | 90000 | 105000 | 120000 | 135000 | 150000 | 165000 | 80000 | 120000 | 150000 | 180000 | 210000 | 240000 | 270000 | 300000 | 330000 | | | | | | | | | | | | | |
| Physical data | Quantity | 1+1+2 | 1+1+2 | 1+1+2 | 1+1+2 | 1+1+2 | 1+1+2 | 1+1+2 | 1+1+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | | | | | | | | | | | | | |
| | Type | 1+1+2 | 1+1+2 | 1+1+2 | 1+1+2 | 1+1+2 | 1+1+2 | 1+1+2 | 1+1+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | 2+2+2 | | | | | | | | | | | | | |
| | Volume | 10+16+16 | 12+16+16 | 14+16+16 | 16+16+16 | 18+16+16 | 20+16+16 | 22+16+16 | 24+16+16 | 26+16+16 | 20+16+16 | 24+16+16 | 28+16+16 | 32+16+16 | 36+16+16 | 40+16+16 | 44+16+16 | 48+16+16 | 52+16+16 | 56+16+16 | | | | | | | | | | | | |
| | Weight | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | |
| | Net weight | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | |

Notes: 1. Cooling operating temperature range is from 5°C to 32°C. Heating operating temperature range is from 20°C to 30°C.
 2. The cooling conditions: indoor side 27°C DB/19°C WB, 50%RH; outdoor side 35°C DB/17°C WB.
 3. The heating conditions: indoor side 20°C DB/17°C WB, 50%RH; outdoor side 7°C DB/2°C WB.
 4. Sound level measured at a point 1m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 5. The above data may be changed without notice for future improvement on quality and performance.

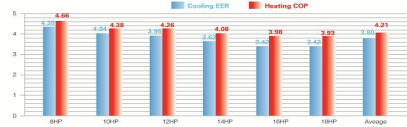
Basic Modules



- DC inverter technology
- High energy saving efficiency
- Single Module: 8/10/12/14/16/18HP
- Max.1000m total pipe length

| | 8HP | 10HP | 12HP | 14HP | 16HP | 18HP |
|------------|--------|------|--------|--------|--------|--------|
| Capacity | 23.2kW | 28kW | 33.5kW | 45kW | 45kW | 50kW |
| Compressor | DC | DC | DC | DC-FIX | DC-FIX | DC-FIX |
| Fan motor | DC | DC | DC-DC | DC-DC | DC-DC | DC-DC |

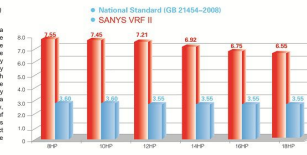
EER & COP



IPLV(C)

IPLV(C) Integrated Part Load Value (ARI 550.950) (C) Cooling condition

The Integrated Part Load Value (IPLV) is a performance characteristic developed by the Air-Conditioning, Heating and Refrigeration Institute (AHRI). It is a real commonly used to describe the performance of an AC system capable of capacity modulation. Unlike an EER (Energy Efficiency Ratio) or COP (coefficient of performance), which describe the efficiency of full-load conditions, the IPLV is defined from the equipment efficiency under operating at various capacities. Since a VRF system does not operate at a 100% capacity, the EER or COP is not an ideal representation of the typical equipment performance. The IPLV is a very important value to consider since it can affect energy usage and operating costs throughout the lifetime of the equipment.



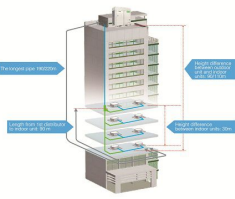
| Model Name | Basic modules | | | | | | 3 modules combination | | | | | | | | | | | | |
|--------------------------------------|---------------|-------------|------|------|-------|-------|-----------------------|-------------|-------|-------|-------|-------|-------|-------------|-------|-------|-------|-------|--|
| | 8HP | 10HP | 12HP | 14HP | 16HP | 18HP | 8HP | 10HP | 12HP | 14HP | 16HP | 18HP | 8HP | 10HP | 12HP | 14HP | 16HP | 18HP | |
| Max. Connected indoor units quantity | 13 | 16 | 15 | 20 | 22 | 24 | 24 | 28 | 28 | 32 | 32 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | |
| Performance data | | | | | | | | | | | | | | | | | | | |
| Cooling | Capacity | 23.2 | 28.0 | 33.5 | 45.0 | 45.0 | 50.0 | 61.5 | 68.8 | 73.0 | 78.5 | 83.5 | 90.0 | 95.0 | 100.0 | 106.5 | 108.5 | 108.5 | |
| | Power input | 6000 | 6900 | 8100 | 10500 | 10500 | 11500 | 20000 | 22000 | 24000 | 25000 | 26000 | 27000 | 28000 | 30000 | 31000 | 32000 | 32000 | |
| | EER | 3.86 | 4.07 | 4.14 | 4.29 | 4.29 | 4.35 | 3.07 | 3.13 | 3.04 | 3.13 | 3.23 | 3.23 | 3.33 | 3.33 | 3.42 | 3.42 | 3.42 | |
| | IPLV(C) | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | |
| Heating | Capacity | 23.2 | 28.0 | 33.5 | 45.0 | 45.0 | 50.0 | 61.5 | 68.8 | 73.0 | 78.5 | 83.5 | 90.0 | 95.0 | 100.0 | 106.5 | 108.5 | 108.5 | |
| | Power input | 6000 | 6900 | 8100 | 10500 | 10500 | 11500 | 20000 | 22000 | 24000 | 25000 | 26000 | 27000 | 28000 | 30000 | 31000 | 32000 | 32000 | |
| | COP | 3.86 | 4.07 | 4.14 | 4.29 | 4.29 | 4.35 | 3.07 | 3.13 | 3.04 | 3.13 | 3.23 | 3.23 | 3.33 | 3.33 | 3.42 | 3.42 | 3.42 | |
| | IPLV(C) | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | |
| Physical data | | | | | | | | | | | | | | | | | | | |
| Compressor | Quantity | 1 | | | | | | 1+1 | | | | | | 1+2 | | | | | |
| Refrigerant | Type | R410A | | | | | | | | | | | | | | | | | |
| | Volume | 10 | | | | | | 12 | | | | | | 14 | | | | | |
| Motor | Type | DC motor | | | | | | | | | | | | | | | | | |
| | Quantity | 1 | | | | | | 2 | | | | | | 3 | | | | | |
| Dimensions (WxDxH) | W | 170-180-185 | | | | | | 180-180-185 | | | | | | 180-180-185 | | | | | |
| | H | 180-180-185 | | | | | | 180-180-185 | | | | | | 180-180-185 | | | | | |
| Net weight | kg | 208 | | | | | | 242 | | | | | | 298 | | | | | |
| | kg | 208 | | | | | | 242 | | | | | | 298 | | | | | |
| Sound pressure level | dB(A) | 58 | | | | | | 64 | | | | | | 61 | | | | | |
| | dB(A) | 58 | | | | | | 64 | | | | | | 61 | | | | | |
| Total equipment | Height | 912.7 | | | | | | 915.9 | | | | | | 915.9 | | | | | |
| | Height | 912.7 | | | | | | 915.9 | | | | | | 915.9 | | | | | |
| Total equipment | Height | 922.4 | | | | | | 925.4 | | | | | | 925.4 | | | | | |
| | Height | 922.4 | | | | | | 925.4 | | | | | | 925.4 | | | | | |
| Total equipment | Height | 932.7 | | | | | | 935.9 | | | | | | 935.9 | | | | | |
| | Height | 932.7 | | | | | | 935.9 | | | | | | 935.9 | | | | | |
| Total equipment | Height | 937.4 | | | | | | 940.4 | | | | | | 940.4 | | | | | |
| | Height | 937.4 | | | | | | 940.4 | | | | | | 940.4 | | | | | |
| Total equipment | Height | 942.8 | | | | | | 945.8 | | | | | | 945.8 | | | | | |
| | Height | 942.8 | | | | | | 945.8 | | | | | | 945.8 | | | | | |

- Cooling operating temperature range is from -9°C to 50°C. Heating operating temperature range is from -20°C to 30°C.
- The cooling conditions: indoor side 20°C(75°F) DB, 15°C(59°F) WB outdoor side 35°C(95°F) DB.
- The heating conditions: indoor side 20°C(68°F) DB, 15°C(59°F) WB outdoor side 7°C(45°F) DB.
- Sound level measured at a point 1m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- The above data may be changed without notice for future improvement on quality and performance.

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Long Piping & Height Difference

- The total pipe length: 1000m
- The longest pipe:
 - Actual length 190m
 - Equivalent length 220m
- Equivalent length from first indoor distributor to last indoor unit: 50m
- Height difference between indoor and outdoor unit:
 - Outdoor unit above <90m
 - Outdoor unit below <110m
- Height difference between indoor units: 30m



Combination Table

| Cooling Capacity | Cooling Capacity(kW) | | | | | | Max. Connected Indoor Unit Quantity |
|------------------|----------------------|------|------|------|------|------|-------------------------------------|
| | 8HP | 10HP | 12HP | 14HP | 16HP | 18HP | |
| 8 | 29.2 | | | | | | 13 |
| 10 | | 36.0 | | | | | 16 |
| 12 | | 33.5 | 45.0 | | | | 16 |
| 14 | | | 45.0 | 50.0 | | | 20 |
| 16 | | | | 45.0 | 50.0 | | 20 |
| 18 | | | | | 50.0 | 50.0 | 24 |
| 20 | | | | | | 50.0 | 24 |
| 22 | | | | | | | 24 |
| 24 | | | | | | | 24 |
| 26 | | | | | | | 24 |
| 28 | | | | | | | 24 |
| 30 | | | | | | | 24 |
| 32 | | | | | | | 24 |
| 34 | | | | | | | 24 |
| 36 | | | | | | | 24 |
| 38 | | | | | | | 24 |
| 40 | | | | | | | 24 |
| 42 | | | | | | | 24 |
| 44 | | | | | | | 24 |
| 46 | | | | | | | 24 |
| 48 | | | | | | | 24 |
| 50 | | | | | | | 24 |
| 52 | | | | | | | 24 |
| 54 | | | | | | | 24 |
| 56 | | | | | | | 24 |
| 58 | | | | | | | 24 |
| 60 | | | | | | | 24 |
| 62 | | | | | | | 24 |
| 64 | | | | | | | 24 |
| 66 | | | | | | | 24 |
| 68 | | | | | | | 24 |
| 70 | | | | | | | 24 |
| 72 | | | | | | | 24 |

| HP | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | |
|--------------------------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
| Model Name | 8HP-415V3PH3HU | 10HP-415V3PH3HU | 12HP-415V3PH3HU | 14HP-415V3PH3HU | 16HP-415V3PH3HU | 18HP-415V3PH3HU | 20HP-415V3PH3HU | 22HP-415V3PH3HU | 24HP-415V3PH3HU | 26HP-415V3PH3HU | 28HP-415V3PH3HU | 30HP-415V3PH3HU | 32HP-415V3PH3HU | 34HP-415V3PH3HU | 36HP-415V3PH3HU | 38HP-415V3PH3HU | 40HP-415V3PH3HU | 42HP-415V3PH3HU | 44HP-415V3PH3HU | 46HP-415V3PH3HU | 48HP-415V3PH3HU | 50HP-415V3PH3HU | |
| Max. Connected indoor units quantity | 42 | 42 | 42 | 48 | 48 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | |
| Performance data | | | | | | | | | | | | | | | | | | | | | | | |
| Cooling | Capacity | 111.5 | 118.0 | 125.5 | 138.5 | 148.0 | 148.0 | 165.0 | 180.0 | 180.0 | 195.0 | 210.0 | 210.0 | 225.0 | 240.0 | 240.0 | 255.0 | 270.0 | 270.0 | 285.0 | 295.0 | 295.0 | |
| | Power input | 29000 | 32000 | 34000 | 42000 | 42000 | 47000 | 47000 | 51000 | 51000 | 55000 | 55000 | 59000 | 59000 | 63000 | 63000 | 67000 | 67000 | 71000 | 71000 | 75000 | 75000 | |
| | EER | 3.7 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | |
| | IPLV(C) | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | |
| Heating | Capacity | 111.5 | 118.0 | 125.5 | 138.5 | 148.0 | 148.0 | 165.0 | 180.0 | 180.0 | 195.0 | 210.0 | 210.0 | 225.0 | 240.0 | 240.0 | 255.0 | 270.0 | 270.0 | 285.0 | 295.0 | 295.0 | |
| | Power input | 29000 | 32000 | 34000 | 42000 | 42000 | 47000 | 47000 | 51000 | 51000 | 55000 | 55000 | 59000 | 59000 | 63000 | 63000 | 67000 | 67000 | 71000 | 71000 | 75000 | 75000 | |
| | COP | 3.86 | 4.07 | 4.14 | 4.29 | 4.29 | 4.35 | 4.35 | 3.07 | 3.13 | 3.04 | 3.13 | 3.23 | 3.23 | 3.33 | 3.33 | 3.42 | 3.42 | 3.42 | 3.42 | 3.42 | 3.42 | |
| | IPLV(C) | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | |
| Physical data | | | | | | | | | | | | | | | | | | | | | | | |
| Compressor | Quantity | 1+1+2 | | | | | | 2+2+2 | | | | | | 2+2+2+2 | | | | | | | | | |
| Refrigerant | Type | R410A | | | | | | | | | | | | | | | | | | | | | |
| | Volume | 10-14-14 | | | | | | 12-14-14 | | | | | | 14-14-14 | | | | | | | | | |
| Motor | Type | DC motor | | | | | | | | | | | | | | | | | | | | | |
| | Quantity | 1+2+2 | | | | | | 2+2+2 | | | | | | 2+2+2+2 | | | | | | | | | |
| Dimensions (WxDxH) | W | 170-180-185 | | | | | | 180-180-185 | | | | | | 180-180-185 | | | | | | | | | |
| | H | 180-180-185 | | | | | | 180-180-185 | | | | | | 180-180-185 | | | | | | | | | |
| Net weight | kg | 208 | | | | | | 242 | | | | | | 298 | | | | | | | | | |
| | kg | 208 | | | | | | 242 | | | | | | 298 | | | | | | | | | |
| Sound pressure level | dB(A) | 58 | | | | | | 64 | | | | | | 61 | | | | | | | | | |
| | dB(A) | 58 | | | | | | 64 | | | | | | 61 | | | | | | | | | |
| Total equipment | Height | 912.7 | | | | | | 915.9 | | | | | | 915.9 | | | | | | | | | |
| | Height | 912.7 | | | | | | 915.9 | | | | | | 915.9 | | | | | | | | | |
| Total equipment | Height | 922.4 | | | | | | 925.4 | | | | | | 925.4 | | | | | | | | | |
| | Height | 922.4 | | | | | | 925.4 | | | | | | 925.4 | | | | | | | | | |
| Total equipment | Height | 932.7 | | | | | | 935.9 | | | | | | 935.9 | | | | | | | | | |
| | Height | 932.7 | | | | | | 935.9 | | | | | | 935.9 | | | | | | | | | |
| Total equipment | Height | 937.4 | | | | | | 940.4 | | | | | | 940.4 | | | | | | | | | |
| | Height | 937.4 | | | | | | 940.4 | | | | | | 940.4 | | | | | | | | | |
| Total equipment | Height | 942.8 | | | | | | 945.8 | | | | | | 945.8 | | | | | | | | | |
| | Height | 942.8 | | | | | | 945.8 | | | | | | 945.8 | | | | | | | | | |

- Cooling operating temperature range is from -9°C to 50°C. Heating operating temperature range is from -20°C to 30°C.
- The cooling conditions: indoor side 20°C(75°F) DB, 15°C(59°F) WB outdoor side 35°C(95°F) DB.
- The heating conditions: indoor side 20°C(68°F) DB, 15°C(59°F) WB outdoor side 7°C(45°F) DB.
- Sound level measured at a point 1m in front of the unit at a height of 1.5m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- The above data may be changed without notice for future improvement on quality and performance.

http://www.danfoss.com

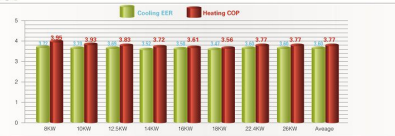
SANYS VRF III MINI SMALL CAPACITY FULL DC INVERTER VRF UNIT

5 Models



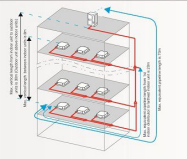
| Capacity | 8kW | 10kW | 12.5kW | 14kW | 16kW | 18kW | 22.4kW | 26kW |
|------------|----------|------|-------------------|----------|-------|-------------------------|--------|-------|
| Compressor | DC | DC | DC | DC | DC | DC | DC | DC |
| Fan motor | DC | DC | DC-DC | DC-DC | DC-DC | DC-DC | DC-DC | DC-DC |
| Power type | 208-230V | | | 380-415V | | | | |
| 50Hz | 1 phase | | 8/10/12.5/14/16kW | | | 12.5/14/16/18/22.4/26kW | | |
| 60Hz | 3 phase | | | | | | | |

EER & COP



Long Piping & Height Difference

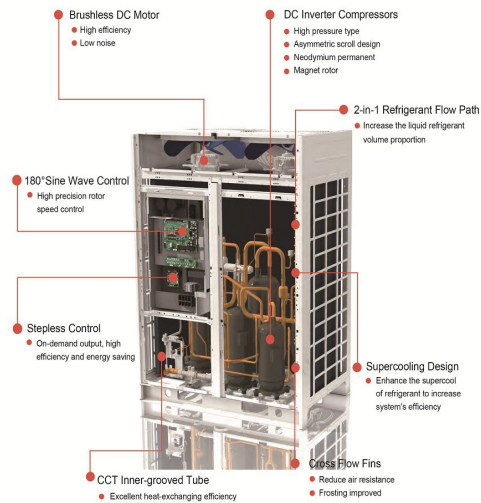
- The total pipe length: 120m
- The longest pipe:
 - Actual length: 60m
 - Equivalent length: 70m
- Equivalent length from first indoor distributor to last indoor unit: 20m
- Height difference between indoor and outdoor unit:
 - Outdoor unit above: <30m
 - Outdoor unit below: <20m
- Height difference between indoor units: 8m



VRF SYSTEM
SANYS VRF II VRF III



Core Technologies Make High Efficient



High Efficiency DC Inverter Compressor

- From Hitachi, famous inverter compressor manufacturer.
- R410a ECO-friendly refrigerant.
- Small torque fluctuation, low vibration and quiet operation.
- High efficiency due to its patent internal structure design.
- Internal oil circulation structure.
- High Reliability.
- Wide rotation speed range.

Neodymium permanent magnet rotor

Powerful magnetic force, large force moment and high efficiency.

Ferrite magnet Neodymium permanent magnet

Concentrated winding

Magnetic efficiency is 12% higher than distributed winding.

Concentrated winding Distributed winding

- High pressure chamber
 - Has small section superheat and high refrigerant volume efficiency
 - Has large refrigerant discharge buffer volume, Low vibration and noise
- Differential pressure oil film control technology: reducing noise and improving gas tightness
- Special scroll design for R410a
- High precision processing, improving compression efficiency by 15%
- Concentrated winding, improving low frequency
- High strength bearing, high rigidity

- Neodymium permanent magnet rotor has powerful magnetic force, large torque and high efficiency.
- Concentrated winding, improving low frequency efficiency.

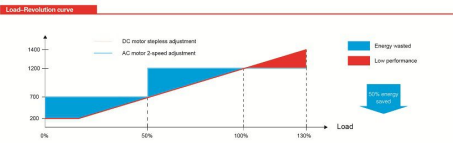
High Efficiency DC Motor

DC fan motor

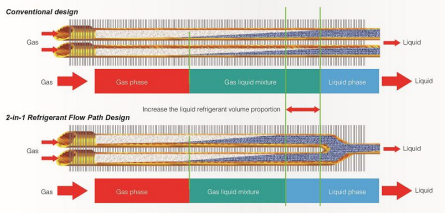
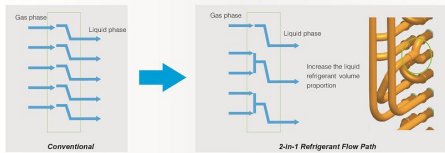
- High efficiency DC fan motor is from well-known brand.
- Low noise and high efficiency because of high-density wire winding engineering.
- Brushless with built-in sensor.

Stepless Control

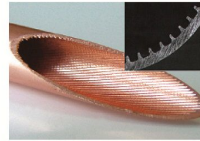
DC fan motor can be stepless controlled by outdoor PCB according to system's operating pressure. And it is able to reduce the energy consumption and maintain the system in the best performance.



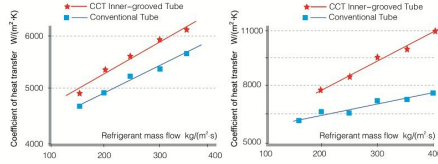
2-in-1 Refrigerant Flow Path Design



CCT Inner-grooved Tube

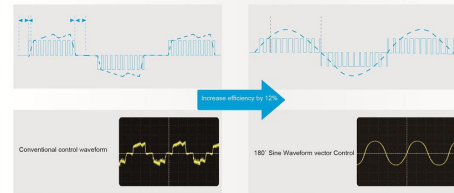


CCT(Continuous Cooling Transformation) inner-grooved copper tube has high thermometric conductivity. This inner-grooved fins break the refrigerant flow boundary layer to enhance refrigerant disturbance to increase heat-exchanging efficiency.

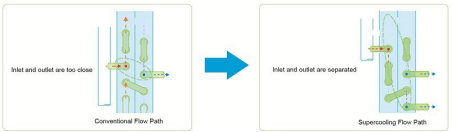


180° Sine Waveform Control

The perfect combination of 180° Sine waveform rotor frequency drive control technology and excellent IPM inverter, reduces the reactive loss of motor-driven, increases motor efficiency by 12%.

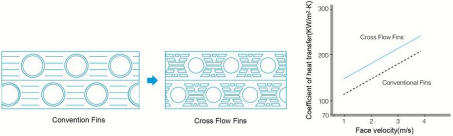


Supercooling Flow Path Design



Supercooling flow path design, separates the refrigerant inlet and outlet, increase the supercooling degree, reduce the effect of high temperature inlet gas refrigerant to low temperature outlet liquid refrigerant, therefore, the system efficiency will be greatly increased.

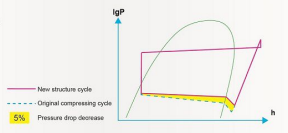
Cross Flow Fins



- Has low air resistance and great heat transfer coefficient.
- Frosting improved, frost on the heat-exchanger will be well-distributed, easy for defrosting.

Low Resistance Internal piping

- Thanks to the optimization pipeline design, 5% pressure drop are reduced.
- EER and COP increase, because of evaporating temperature increase and compressor work decrease.



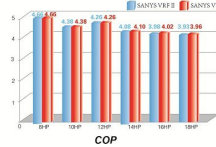
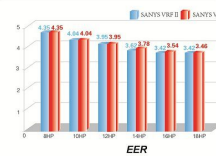
Benefits For Users

Liveable environment creator

SANYS focuses on starting point of AC system: create a friendly, comfortable and pleasant living environment as always. New DC VRF system's comfort technologies include quick cooling and heating, precise temperature control, low noise, use environmental friendly refrigerant and so on, we strive to create liveable environment for users.....

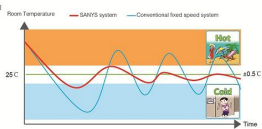


Excellent in EER and COP



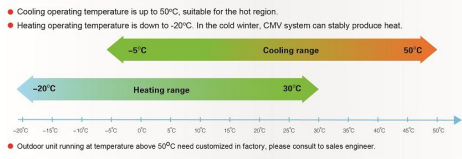
Thanks to DC devices (compressor and motor), piping optimization design and new refrigerant control logic, system's EER and COP are significantly increase.

Outstanding Comfort Ability



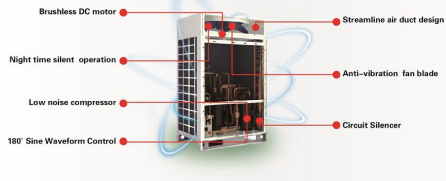
- SANYS CMV system have excellent cooling & heating performance, thanks to the high efficiency DC fan motor, DC compressor and optimized refrigerant flow control logic.
- Precisely room temperature control by adopting 2000 pulse EXV. Indoor temperature fluctuation can be maintain within 0.5°C, offers outstanding comfort ability.

Wide Operation Range

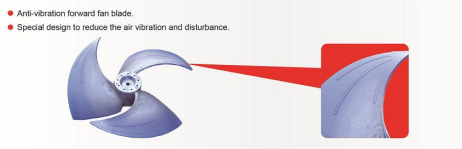


7 Improvements To Reduce Noise

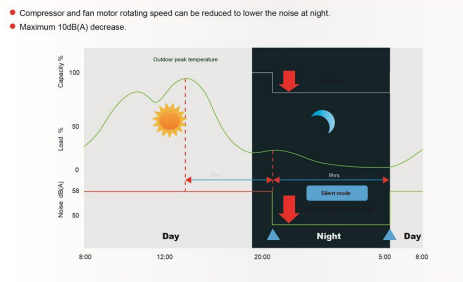
Maximum 10dB(A) of operating sound decrease.



Low Noise Fan Blade



Silent Mode, Night Time Noise Control



Snow-proof Function



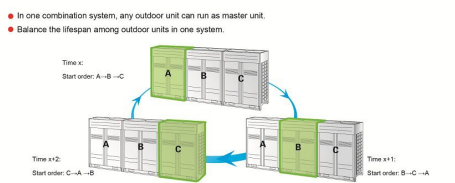
The PHE Economizer



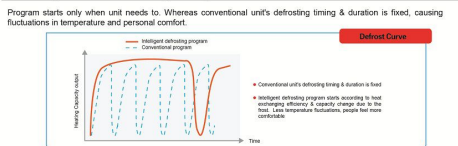
3-stage Back Up Function



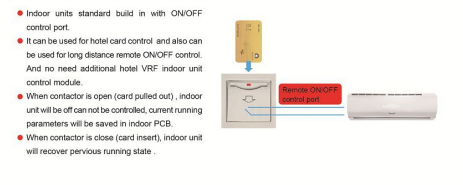
All Outdoor Units Cycle Operation



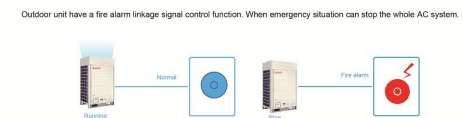
Intelligent Defrosting Program



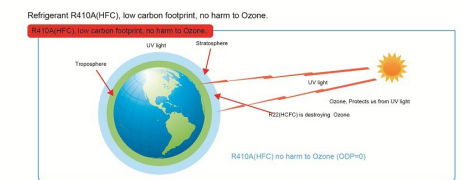
Remote ON/OFF Control Function



Emergency Stop Operation Function



Environment Friendly



Benefits For Installers



Optimization for designer and installer

SANYS DC inverter VRF system is designed with flexible modular combination concept, we keep optimizing the module size, reduce equipment on space occupied to meet the demand of designer and installer. Some unique technologies are used for our installers to reduce their working load, installation is becoming easier and easier!

4 Units Combination, Capacity Up To 72HP

Max. outdoor units can be combined into a bigger system, capacity can be up to 72HP.



Individual Type, Saving Installation Work

Individual type outdoor unit is already combined in chigo factory, installer can save outdoor unit combination work.



Adjustable Outdoor Fan Static Pressure



- Thanks to DC fan motor, the external static pressure of outdoor fan is adjustable.
- Outdoor units can be installed in the service floor or facility room.
- Maximum ESP 85Pa.

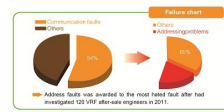
New Wired Controller



- Bidirectional communication, Indoor unit's operating parameters (error code, temperature, address) can be required and displayed on the controller.
- Compact design.
- Timer function.

User can check the error code and inquiry unit status very easy, safe and convenient.

Automatic Addressing



- Automatic addressing will reduce artificial faults by 35% and 5% manual works.
- 54% system failure were caused by communication faults.
- 65% communication faults were caused by address problems.
- Most of the address problems were: address setting forgotten, wrong settings, address repeat.

Addressing Methods



- 2 addressing methods:
 - Automatically addressing system will distribute address to indoor unit automatically.
 - Manually setting by wireless remote controller.
- Addressing method can be selected easily by adjusting the switch on outdoor PCB.

LED Display On The PCB



LED display on the PCB, it can show system's operation status and error codes.

Refrigerant Recycle Program



- Press the forced cooling button, after the unit running for a few minutes, close the high pressure stop valve.
- After the digital tube display 'dh' and the low pressure value, close the low pressure stop valve and cut off the power.

Service Window



Thanks to the service window, checking outdoor unit's status and setting is now easy, no need to remove the electric control box cover.

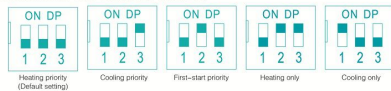
Humanized Internal Structure



- All key components are designed to close to outside, it is convenient for repair and replacement.
- Thanks to the new balance technology, gas balance pipe does no longer exist, brazing points and leaking risk are decreased.

Mode Restriction

- 5 kinds of mode restriction:
 - First start indoor units priority mode.
 - Cooling/heating priority mode.
 - Cooling only/heating only mode.
- Mode restriction function can be selected on the outdoor PCB.



6-Stage Oil Control

1st stage: Compressor internal oil separation



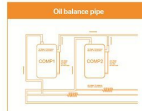
2nd stage: Oil return from the oil even pipe



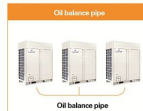
3rd stage: Oil return from the system oil separator



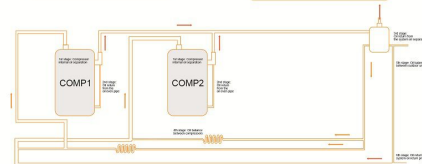
4th stage: Oil balance between compressors



5th stage: Oil balance between outdoor units



6th stage: Oil return by system oil return program



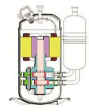
VRF SYSTEM

SANYS VRF III-mini



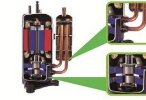
SANYS VRF III -mini

High Efficiency DC Inverter Compressor



- High efficiency
- High reliability
- Low vibration
- Low noise
- Long life

- Twin-rotary DC inverter compressor
 - Use high efficiency and reliability compressor
 - Rotating speed can be down to 20RPS
 - Has very good efficiency in part load condition
- High Efficiency, Low Noise:
 - Optimized the efficiency and noise during operation with the latest technology.
- Environmental Protection:
 - Developed the compressor with alternative refrigerant which can protect environment.
- Low Vibration:
 - Reduced the vibration during compressor start and operation by using 3D/C structure, simplified the match of air-conditioning.

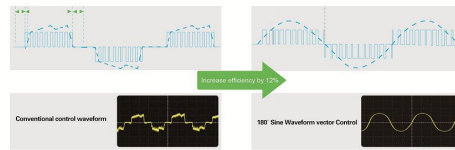


High Efficiency DC Motor



- High efficiency DC fan motor
- Low noise and high efficiency because of high-density wire winding engineering
- Brushless with built-in sensor

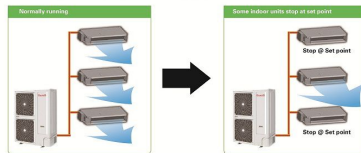
180° Sine Wave Control



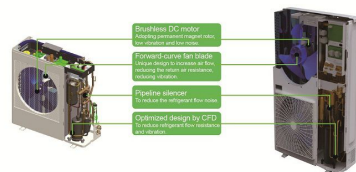
The perfect combination of 180° Sine wave rotor frequency drive control technology and excellent IPM inverters, reduces the reactive loss of motor-driven, increases motor efficiency by 12%.

Fast Cooling And Heating

Every rooms meet set point most quickly and comfortably by optimized refrigerant control.

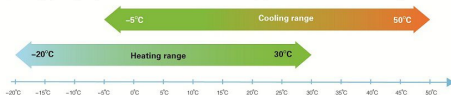


Silent Technology



Wide Outdoor Operation Range

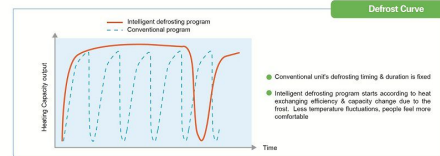
- Because global warming is getting worse, Max. cooling operating temperature is increased to 50°C.
- Heating operating temperature is down to -20°C. In the cold winter, system can heat the room continuously.



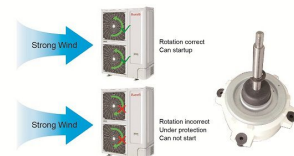
● Outdoor unit running at temperature above 50°C need customized in factory, please consult to sales engineer.

Intelligent Defrosting Program

Program starts only when unit needs to. Whereas conventional unit's defrosting timing & duration is fixed, causing fluctuations in temperature and personal comfort.

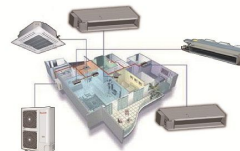


Fan Reversal Protection



In standby, if the outdoor fan motor is rotating in opposite direction at a high speed by the wind or other natural factors, the unit can't start so as to keep the fan motor from broken down. It will start when the fan motor speed slow down.

Space Saving Installation



- Multiple indoor units can be connected to 1 outdoor unit, and long piping connection is also possible.
- Compare to one-drive-one type, the outdoor unit can be installed in various places to realize the space-saving installation.

Active PFC Module

- PFC: Power Factor Corrector
- There will be a power loss because of the different phases between the voltage and current.
- With the PFC module, the power utilization rate is higher, power factor can be up to 98%. System will be more efficiency.



- Power factor refers to the relationship between effective power and total power consumption, power factor is effective power divided by total power consumption.
- Power factor can measure power utilization rate, the power factor bigger, the higher power utilization rate.

Automatically Addressing

- Automatically addressing system will distribute address to indoor unit automatically
- Automatic addressing will reduce artificial faults and manual works.



LED Display On PCB

- LED display on the PCB, it can show system's operation status and error codes.



SANYS VRF III mini Specification

| Model name | Power type | Capacity (kW) | Max. cooling capacity (kW) | Max. heating capacity (kW) | Max. cooling capacity (kW) | Max. heating capacity (kW) | Max. cooling capacity (kW) | Max. heating capacity (kW) | Max. cooling capacity (kW) | Max. heating capacity (kW) | Max. cooling capacity (kW) | Max. heating capacity (kW) | Max. cooling capacity (kW) | Max. heating capacity (kW) | Max. cooling capacity (kW) | Max. heating capacity (kW) | Max. cooling capacity (kW) | Max. heating capacity (kW) | |
|------------|---------------|---------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-------|
| SDV080C3 | 220-240V/50Hz | 8 | 22.0 | 22.0 | 12.1 | 12.1 | 8 | 22.0 | 22.0 | 12.1 | 12.1 | 8 | 22.0 | 22.0 | 12.1 | 12.1 | 8 | 22.0 | 22.0 |
| SDV080C3 | 220-240V/50Hz | 10 | 28.0 | 28.0 | 15.0 | 15.0 | 10 | 28.0 | 28.0 | 15.0 | 15.0 | 10 | 28.0 | 28.0 | 15.0 | 15.0 | 10 | 28.0 | 28.0 |
| SDV080C3 | 220-240V/50Hz | 12.5 | 35.0 | 35.0 | 18.8 | 18.8 | 12.5 | 35.0 | 35.0 | 18.8 | 18.8 | 12.5 | 35.0 | 35.0 | 18.8 | 18.8 | 12.5 | 35.0 | 35.0 |
| SDV080C3 | 220-240V/50Hz | 15 | 42.0 | 42.0 | 22.4 | 22.4 | 15 | 42.0 | 42.0 | 22.4 | 22.4 | 15 | 42.0 | 42.0 | 22.4 | 22.4 | 15 | 42.0 | 42.0 |
| SDV080C3 | 220-240V/50Hz | 18 | 50.0 | 50.0 | 26.6 | 26.6 | 18 | 50.0 | 50.0 | 26.6 | 26.6 | 18 | 50.0 | 50.0 | 26.6 | 26.6 | 18 | 50.0 | 50.0 |
| SDV080C3 | 220-240V/50Hz | 22 | 60.0 | 60.0 | 31.7 | 31.7 | 22 | 60.0 | 60.0 | 31.7 | 31.7 | 22 | 60.0 | 60.0 | 31.7 | 31.7 | 22 | 60.0 | 60.0 |
| SDV080C3 | 220-240V/50Hz | 26 | 70.0 | 70.0 | 36.8 | 36.8 | 26 | 70.0 | 70.0 | 36.8 | 36.8 | 26 | 70.0 | 70.0 | 36.8 | 36.8 | 26 | 70.0 | 70.0 |
| SDV080C3 | 220-240V/50Hz | 32 | 84.0 | 84.0 | 43.7 | 43.7 | 32 | 84.0 | 84.0 | 43.7 | 43.7 | 32 | 84.0 | 84.0 | 43.7 | 43.7 | 32 | 84.0 | 84.0 |
| SDV080C3 | 220-240V/50Hz | 38 | 98.0 | 98.0 | 50.7 | 50.7 | 38 | 98.0 | 98.0 | 50.7 | 50.7 | 38 | 98.0 | 98.0 | 50.7 | 50.7 | 38 | 98.0 | 98.0 |
| SDV080C3 | 220-240V/50Hz | 45 | 112.0 | 112.0 | 57.7 | 57.7 | 45 | 112.0 | 112.0 | 57.7 | 57.7 | 45 | 112.0 | 112.0 | 57.7 | 57.7 | 45 | 112.0 | 112.0 |
| SDV080C3 | 220-240V/50Hz | 52 | 126.0 | 126.0 | 64.7 | 64.7 | 52 | 126.0 | 126.0 | 64.7 | 64.7 | 52 | 126.0 | 126.0 | 64.7 | 64.7 | 52 | 126.0 | 126.0 |
| SDV080C3 | 220-240V/50Hz | 60 | 140.0 | 140.0 | 71.7 | 71.7 | 60 | 140.0 | 140.0 | 71.7 | 71.7 | 60 | 140.0 | 140.0 | 71.7 | 71.7 | 60 | 140.0 | 140.0 |
| SDV080C3 | 220-240V/50Hz | 70 | 160.0 | 160.0 | 81.7 | 81.7 | 70 | 160.0 | 160.0 | 81.7 | 81.7 | 70 | 160.0 | 160.0 | 81.7 | 81.7 | 70 | 160.0 | 160.0 |
| SDV080C3 | 220-240V/50Hz | 80 | 176.0 | 176.0 | 91.7 | 91.7 | 80 | 176.0 | 176.0 | 91.7 | 91.7 | 80 | 176.0 | 176.0 | 91.7 | 91.7 | 80 | 176.0 | 176.0 |
| SDV080C3 | 220-240V/50Hz | 90 | 192.0 | 192.0 | 101.7 | 101.7 | 90 | 192.0 | 192.0 | 101.7 | 101.7 | 90 | 192.0 | 192.0 | 101.7 | 101.7 | 90 | 192.0 | 192.0 |
| SDV080C3 | 220-240V/50Hz | 100 | 210.0 | 210.0 | 111.7 | 111.7 | 100 | 210.0 | 210.0 | 111.7 | 111.7 | 100 | 210.0 | 210.0 | 111.7 | 111.7 | 100 | 210.0 | 210.0 |
| SDV080C3 | 220-240V/50Hz | 110 | 228.0 | 228.0 | 121.7 | 121.7 | 110 | 228.0 | 228.0 | 121.7 | 121.7 | 110 | 228.0 | 228.0 | 121.7 | 121.7 | 110 | 228.0 | 228.0 |
| SDV080C3 | 220-240V/50Hz | 120 | 246.0 | 246.0 | 131.7 | 131.7 | 120 | 246.0 | 246.0 | 131.7 | 131.7 | 120 | 246.0 | 246.0 | 131.7 | 131.7 | 120 | 246.0 | 246.0 |
| SDV080C3 | 220-240V/50Hz | 130 | 264.0 | 264.0 | 141.7 | 141.7 | 130 | 264.0 | 264.0 | 141.7 | 141.7 | 130 | 264.0 | 264.0 | 141.7 | 141.7 | 130 | 264.0 | 264.0 |
| SDV080C3 | 220-240V/50Hz | 140 | 282.0 | 282.0 | 151.7 | 151.7 | 140 | 282.0 | 282.0 | 151.7 | 151.7 | 140 | 282.0 | 282.0 | 151.7 | 151.7 | 140 | 282.0 | 282.0 |
| SDV080C3 | 220-240V/50Hz | 150 | 300.0 | 300.0 | 161.7 | 161.7 | 150 | 300.0 | 300.0 | 161.7 | 161.7 | 150 | 300.0 | 300.0 | 161.7 | 161.7 | 150 | 300.0 | 300.0 |
| SDV080C3 | 220-240V/50Hz | 160 | 318.0 | 318.0 | 171.7 | 171.7 | 160 | 318.0 | 318.0 | 171.7 | 171.7 | 160 | 318.0 | 318.0 | 171.7 | 171.7 | 160 | 318.0 | 318.0 |
| SDV080C3 | 220-240V/50Hz | 170 | 336.0 | 336.0 | 181.7 | 181.7 | 170 | 336.0 | 336.0 | 181.7 | 181.7 | 170 | 336.0 | 336.0 | 181.7 | 181.7 | 170 | 336.0 | 336.0 |
| SDV080C3 | 220-240V/50Hz | 180 | 354.0 | 354.0 | 191.7 | 191.7 | 180 | 354.0 | 354.0 | 191.7 | 191.7 | 180 | 354.0 | 354.0 | 191.7 | 191.7 | 180 | 354.0 | 354.0 |
| SDV080C3 | 220-240V/50Hz | 190 | 372.0 | 372.0 | 201.7 | 201.7 | 190 | 372.0 | 372.0 | 201.7 | 201.7 | 190 | 372.0 | 372.0 | 201.7 | 201.7 | 190 | 372.0 | 372.0 |
| SDV080C3 | 220-240V/50Hz | 200 | 390.0 | 390.0 | 211.7 | 211.7 | 200 | 390.0 | 390.0 | 211.7 | 211.7 | 200 | 390.0 | 390.0 | 211.7 | 211.7 | 200 | 390.0 | 390.0 |
| SDV080C3 | 220-240V/50Hz | 210 | 408.0 | 408.0 | 221.7 | 221.7 | 210 | 408.0 | 408.0 | 221.7 | 221.7 | 210 | 408.0 | 408.0 | 221.7 | 221.7 | 210 | 408.0 | 408.0 |
| SDV080C3 | 220-240V/50Hz | 220 | 426.0 | 426.0 | 231.7 | 231.7 | 220 | 426.0 | 426.0 | 231.7 | 231.7 | 220 | 426.0 | 426.0 | 231.7 | 231.7 | 220 | 426.0 | 426.0 |
| SDV080C3 | 220-240V/50Hz | 230 | 444.0 | 444.0 | 241.7 | 241.7 | 230 | 444.0 | 444.0 | 241.7 | 241.7 | 230 | 444.0 | 444.0 | 241.7 | 241.7 | 230 | 444.0 | 444.0 |
| SDV080C3 | 220-240V/50Hz | 240 | 462.0 | 462.0 | 251.7 | 251.7 | 240 | 462.0 | 462.0 | 251.7 | 251.7 | 240 | 462.0 | 462.0 | 251.7 | 251.7 | 240 | 462.0 | 462.0 |
| SDV080C3 | 220-240V/50Hz | 250 | 480.0 | 480.0 | 261.7 | 261.7 | 250 | 480.0 | 480.0 | 261.7 | 261.7 | 250 | 480.0 | 480.0 | 261.7 | 261.7 | 250 | 480.0 | 480.0 |
| SDV080C3 | 220-240V/50Hz | 260 | 498.0 | 498.0 | 271.7 | 271.7 | 260 | 498.0 | 498.0 | 271.7 | 271.7 | 260 | 498.0 | 498.0 | 271.7 | 271.7 | 260 | 498.0 | 498.0 |
| SDV080C3 | 220-240V/50Hz | 270 | 516.0 | 516.0 | 281.7 | 281.7 | 270 | 516.0 | 516.0 | 281.7 | 281.7 | 270 | 516.0 | 516.0 | 281.7 | 281.7 | 270 | 516.0 | 516.0 |
| SDV080C3 | 220-240V/50Hz | 280 | 534.0 | 534.0 | 291.7 | 291.7 | 280 | 534.0 | 534.0 | 291.7 | 291.7 | 280 | 534.0 | 534.0 | 291.7 | 291.7 | 280 | 534.0 | 534.0 |
| SDV080C3 | 220-240V/50Hz | 290 | 552.0 | 552.0 | 301.7 | 301.7 | 290 | 552.0 | 552.0 | 301.7 | 301.7 | 290 | 552.0 | 552.0 | 301.7 | 301.7 | 290 | 552.0 | 552.0 |
| SDV080C3 | 220-240V/50Hz | 300 | 570.0 | 570.0 | 311.7 | 311.7 | 300 | 570.0 | 570.0 | 311.7 | 311.7 | 300 | 570.0 | 570.0 | 311.7 | 311.7 | 300 | 570.0 | 570.0 |
| SDV080C3 | 220-240V/50Hz | 310 | 588.0 | 588.0 | 321.7 | 321.7 | 310 | 588.0 | 588.0 | 321.7 | 321.7 | 310 | 588.0 | 588.0 | 321.7 | 321.7 | 310 | 588.0 | 588.0 |
| SDV080C3 | 220-240V/50Hz | 320 | 606.0 | 606.0 | 331.7 | 331.7 | 320 | 606.0 | 606.0 | 331.7 | 331.7 | 320 | 606.0 | 606.0 | 331.7 | 331.7 | 320 | 606.0 | 606.0 |
| SDV080C3 | 220-240V/50Hz | 330 | 624.0 | 624.0 | 341.7 | 341.7 | 330 | 624.0 | 624.0 | 341.7 | 341.7 | 330 | 624.0 | 624.0 | 341.7 | 341.7 | 330 | 624.0 | 624.0 |
| SDV080C3 | 220-240V/50Hz | 340 | 642.0 | 642.0 | 351.7 | 351.7 | 340 | 642.0 | 642.0 | 351.7 | 351.7 | 340 | 642.0 | 642.0 | 351.7 | 351.7 | 340 | 642.0 | 642.0 |
| SDV080C3 | 220-240V/50Hz | 350 | 660.0 | 660.0 | 361.7 | 361.7 | 350 | 660.0 | 660.0 | 361.7 | 361.7 | 350 | 660.0 | 660.0 | 361.7 | 361.7 | 350 | 660.0 | 660.0 |
| SDV080C3 | 220-240V/50Hz | 360 | 678.0 | 678.0 | 371.7 | 371.7 | 360 | 678.0 | 678.0 | 371.7 | 371.7 | 360 | 678.0 | 678.0 | 371.7 | 371.7 | 360 | 678.0 | 678.0 |
| SDV080C3 | 220-240V/50Hz | 370 | 696.0 | 696.0 | 381.7 | 381.7 | 370 | 696.0 | 696.0 | 381.7 | 381.7 | 370 | 696.0 | 696.0 | 381.7 | 381.7 | 370 | 696.0 | 696.0 |
| SDV080C3 | 220-240V/50Hz | 380 | 714.0 | 714.0 | 391.7 | 391.7 | 380 | 714.0 | 714.0 | 391.7 | 391.7 | 380 | 714.0 | 714.0 | 391.7 | 391.7 | 380 | 714.0 | 714.0 |
| SDV080C3 | 220-240V/50Hz | 390 | 732.0 | 732.0 | 401.7 | 401.7 | 390 | 732.0 | 732.0 | 401.7 | 401.7 | 390 | 732.0 | 732.0 | 401.7 | 401.7 | 390 | 732.0 | 732.0 |
| SDV080C3 | 220-240V/50Hz | 400 | 750.0 | 750.0 | 411.7 | 411.7 | 400 | 750.0 | 750.0 | 411.7 | 411.7 | 400 | 750.0 | 750.0 | 411.7 | 411.7 | 400 | 750.0 | 750.0 |
| SDV080C3 | 220-240V/50Hz | 410 | 768.0 | 768.0 | 421.7 | 421.7 | 410 | 768.0 | 768.0 | 421.7 | 421.7 | 410 | 768.0 | 768.0 | 421.7 | 421.7 | 410 | 768.0 | 768.0 |
| SDV080C3 | 220-240V/50Hz | 420 | 786.0 | 786.0 | 431.7 | 431.7 | 420 | 786.0 | 786.0 | 431.7 | 431.7 | 420 | 786.0 | 786.0 | 431.7 | 431.7 | 420 | 786.0 | 786.0 |
| SDV080C3 | 220-240V/50Hz | 430 | 804.0 | 804.0 | 441.7 | 441.7 | 430 | 804.0 | 804.0 | 441.7 | 441.7 | 430 | 804.0 | 804.0 | 441.7 | 441.7 | 430 | 804.0 | 804.0 |
| SDV080C3 | 220-240V/50Hz | 440 | 822.0 | 822.0 | 451.7 | 451.7 | 440 | 822.0 | 822.0 | 451.7 | 451.7 | 440 | 822.0 | 822.0 | 451.7 | 451.7 | 440 | 822.0 | 822.0 |
| SDV080C3 | 220-240V/50Hz | 450 | 840.0 | 840.0 | 461.7 | 461.7 | 450 | 840.0 | 840.0 | 461.7 | 461.7 | 450 | 840.0 | 840.0 | 461.7 | 461.7 | 450 | 840.0 | 840.0 |
| SDV080C3 | 220- | | | | | | | | | | | | | | | | | | |

Wall Mounted Unit



Controller
Standard Wireless



Features

Accessories

| Plenum box | Air filter | EXV | Drain pump | AC Motor | DC Motor |
|------------|------------|---------------------|------------|----------|----------|
| / | Standard | Standard (built-in) | / | Standard | / |

Air supply smoothly

Cross flow fan. In Cooling mode, cold air is blown from horizontal. In heating mode, warm air is blown from vertical.

4 panels can be chosen, suitable for all kinds of decoration style

Simple, elegant, stylish, mirror design, suitable for all kinds of decoration style.

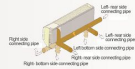


Flexible in installation

Refrigerant pipe can be connected from 3 directions.

Wide adjustable angle air supply

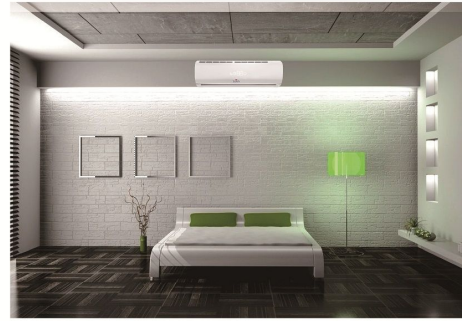
55°Wide angle air supply. Lower angle can be fixed or set to auto-swing by controller.



Specification

| Model name | Power (kW) | Capacity | | | Max. Total A/B | Max. Total A/B (kW) | Max. Total A/B (kWh) | Max. Total A/B (kWh) | Max. Total A/B (kWh) | Dimension (W×H×D) | | Body Weight | | Connection Pipe | | Refrigerant | | |
|------------|------------|--------------|--------------|-----------|----------------|---------------------|----------------------|----------------------|----------------------|-------------------|--------------|-------------|--------|-----------------|--------|-------------|--------|--------|
| | | Cooling (kW) | Heating (kW) | Max. (kW) | | | | | | W (mm) | H (mm) | W (kg) | H (kg) | φ (mm) | L (mm) | | W (mm) | H (mm) |
| SV028BC | 2.8 | 2.2 | 2.5 | 2.5 | 6.5 | 6.5 | 34.0 | 34.0 | 34.0 | 795-907-209 | 800-200-209 | 12 | 14 | 18 | 18 | 3/8 | 3/8 | 410R32 |
| SV036BC | 3.6 | 2.8 | 3.2 | 3.2 | 8.0 | 8.0 | 38.0 | 38.0 | 38.0 | 875-907-209 | 880-200-209 | 12 | 14 | 18 | 18 | 3/8 | 3/8 | 410R32 |
| SV048BC | 4.8 | 3.6 | 4.0 | 4.0 | 10.0 | 10.0 | 42.0 | 42.0 | 42.0 | 875-907-209 | 880-200-209 | 12 | 14 | 18 | 18 | 3/8 | 3/8 | 410R32 |
| SV060BC | 6.0 | 4.5 | 5.0 | 5.0 | 12.0 | 12.0 | 46.0 | 46.0 | 46.0 | 875-907-209 | 880-200-209 | 12 | 14 | 18 | 18 | 3/8 | 3/8 | 410R32 |
| SV072BC | 7.2 | 5.5 | 6.0 | 6.0 | 14.0 | 14.0 | 50.0 | 50.0 | 50.0 | 1020-907-209 | 1030-200-209 | 12 | 14 | 18 | 18 | 3/8 | 3/8 | 410R32 |
| SV084BC | 8.4 | 6.5 | 7.0 | 7.0 | 16.0 | 16.0 | 54.0 | 54.0 | 54.0 | 1020-907-209 | 1030-200-209 | 12 | 14 | 18 | 18 | 3/8 | 3/8 | 410R32 |

Notes: 1. Power supply: 220-240V/50Hz for SV06. 2. Cooling test condition: indoor side 27°C DB, 18°C WB; outdoor side 35°C DB. Heating test condition: indoor side 20°C DB, 15°C WB; outdoor side 7°C DB. 3. Sound level: measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions. 4. The above data may be changed without notice for future improvement on quality and performance.



Floor Ceiling Unit



Controller
Standard Wireless



Features

Accessories

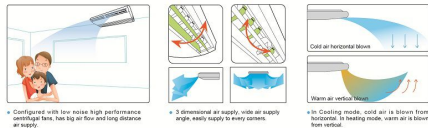
| Plenum box | Air filter | EXV | Drain pump | AC Motor | DC Motor |
|------------|------------|---------------------|------------|----------|----------|
| / | Standard | Standard (built-in) | Optional | Standard | / |

Suspended installation, saves valuable floor space

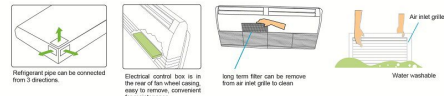
The use of an effect: need to take up valuable floor position. The use of a hanging type indoor machine effect. Due to the adoption of a suspended installation, without occupying the ground position, will be valuable floor space to save up to add a set of dining table.



Wide angle air supply



Easy for installation



Specification

| Model name | Power (kW) | Capacity | | | Max. Total A/B | Max. Total A/B (kW) | Max. Total A/B (kWh) | Max. Total A/B (kWh) | Max. Total A/B (kWh) | Dimension (W×H×D) | | Body Weight | | Connection Pipe | | Refrigerant | | |
|------------|------------|--------------|--------------|-----------|----------------|---------------------|----------------------|----------------------|----------------------|-------------------|--------------|-------------|--------|-----------------|--------|-------------|--------|--------|
| | | Cooling (kW) | Heating (kW) | Max. (kW) | | | | | | W (mm) | H (mm) | W (kg) | H (kg) | φ (mm) | L (mm) | | W (mm) | H (mm) |
| SV048BC | 4.8 | 3.5 | 3.8 | 3.8 | 9.0 | 9.0 | 42.0 | 42.0 | 42.0 | 1050-770-209 | 1070-420-209 | 26 | 42 | 18 | 18 | 3/8 | 3/8 | 410R32 |
| SV060BC | 6.0 | 4.5 | 5.0 | 5.0 | 11.0 | 11.0 | 46.0 | 46.0 | 46.0 | 1050-770-209 | 1070-420-209 | 26 | 42 | 18 | 18 | 3/8 | 3/8 | 410R32 |
| SV072BC | 7.2 | 5.5 | 6.0 | 6.0 | 13.0 | 13.0 | 50.0 | 50.0 | 50.0 | 1050-770-209 | 1070-420-209 | 26 | 42 | 18 | 18 | 3/8 | 3/8 | 410R32 |
| SV084BC | 8.4 | 6.5 | 7.0 | 7.0 | 15.0 | 15.0 | 54.0 | 54.0 | 54.0 | 1050-770-209 | 1070-420-209 | 26 | 42 | 18 | 18 | 3/8 | 3/8 | 410R32 |
| SV100BC | 10.0 | 7.5 | 8.0 | 8.0 | 18.0 | 18.0 | 62.0 | 62.0 | 62.0 | 1050-770-209 | 1070-420-209 | 26 | 42 | 18 | 18 | 3/8 | 3/8 | 410R32 |
| SV120BC | 12.0 | 9.0 | 10.0 | 10.0 | 21.0 | 21.0 | 70.0 | 70.0 | 70.0 | 1050-770-209 | 1070-420-209 | 26 | 42 | 18 | 18 | 3/8 | 3/8 | 410R32 |
| SV144BC | 14.4 | 10.5 | 11.5 | 11.5 | 24.0 | 24.0 | 78.0 | 78.0 | 78.0 | 1050-770-209 | 1070-420-209 | 26 | 42 | 18 | 18 | 3/8 | 3/8 | 410R32 |
| SV168BC | 16.8 | 12.0 | 13.0 | 13.0 | 27.0 | 27.0 | 86.0 | 86.0 | 86.0 | 1050-770-209 | 1070-420-209 | 26 | 42 | 18 | 18 | 3/8 | 3/8 | 410R32 |

Notes: 1. Power supply: 220-240V/50Hz for SV06. 2. Cooling test condition: indoor side 27°C DB, 18°C WB; outdoor side 35°C DB. Heating test condition: indoor side 20°C DB, 15°C WB; outdoor side 7°C DB. 3. Sound level: measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions. 4. The above data may be changed without notice for future improvement on quality and performance.



Fresh Air Processor



Controller
Standard Wireless



Features

Accessories

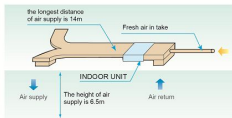
| Plenum box | Air filter | EVV | Drain pump | AC Motor | DC Motor |
|------------|------------|---------------------|------------|----------|----------|
| Standard | Standard | Standard (built-in) | Optional | Standard | / |

Healthy and comfortable

Fresh air is imported, provides a healthy and comfortable living environment.

100% Fresh air processing unit

Both fresh air filtration and heating/cooling can be achieved in a single system. Indoor units and fresh air processing unit can be connected to the same refrigerant system, increase design flexibility and greatly reduce total system costs.

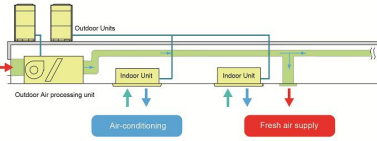


High external static pressure

External static pressure can be up to 220Pa for more flexible duct applications. The maximum distance of air supply is about 14m and the maximum height of air supply is about 6.5m.

Innovative air supply technology for excellent room temperature control

Layout Example:



Specification

| Model name | Power supply | Capacity | | | Max. Heat | KJ/hour | Total EHP | Powers | Compressor (W/Hz) | Daily Energy | | Compressor (W/Hz) | Capacity (W/Hz) |
|------------|--------------|----------|-------|------------------|-----------|---------|-----------|--------|-------------------|--------------|------|-------------------|-----------------|
| | | Cooling | Heat | Dehumidification | | | | | | W/Hz | W/Hz | | |
| 9UC20HR | 50V | 14.8 | 47.7 | 19.5 | 30.7 | 8.45 | 140 | 4.5 | 220-240V/50Hz | 4.5 | 51 | 9419 | 6033 |
| 9UC25HR | 50V | 22.4 | 78.4 | 30.0 | 54.3 | 1.2 | 200 | 10.5 | 220-240V/50Hz | 10.5 | 106 | 10222 | 8727 |
| 9UC35HR | 50V | 38.6 | 125.0 | 45.0 | 88.2 | 1.2 | 300 | 16.0 | 220-240V/50Hz | 16.0 | 182 | 16100 | 13827 |
| 9UC45HR | 50V | 45.0 | 155.5 | 54.0 | 107.1 | 1.6 | 400 | 20.0 | 220-240V/50Hz | 20.0 | 222 | 20000 | 17150 |
| 9UC55HR | 50V | 55.0 | 185.0 | 65.0 | 133.2 | 2.5 | 500 | 25.0 | 220-240V/50Hz | 25.0 | 272 | 24000 | 20400 |

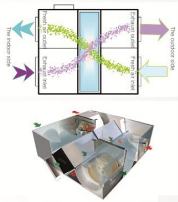
Notes: 1. 450V & 50Hz power supply are 100-110V/50Hz for 50Hz, the others power supply is 220-240V/50Hz for 50Hz.
2. Cooling test condition: indoor and outdoor side 27°C DB, 19°C WB. Heating test condition: indoor and outdoor side 20°C DB, -2°C WB.
3. Sound level measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
4. The above data may be changed without notice for future improvement on quality and performance.



Heat Recovery Ventilator



Features



How it works

When air flow formed by exhaust air and outdoor air through the heat exchanged core in cross way, because of temperature difference in the two sides of flat partition board, the heat transmission is occurred.

In summer, outdoor air acquire cooling from air exhaust to decrease environment temperature. In winter, outdoor air acquire heating from air exhaust to increase temperature, that is to say, it realizing the energy recovery during air exhaust process to exchange the heating in heat exchanged core to outdoor air.

Application for: business office buildings, hotels, restaurants, meeting rooms, exhibition centres, leisure centres, workshop and other places.

Specification

Suspended type specification

| Model | Air flow (m³/h) | Pa | Power (W) | Temperature difference (°C) | Capacity (W/Hz) | Summer | | Winter | | Noise (dB(A)) | Dimension (mm) | Weight (kg) |
|----------|-----------------|-----|-----------|-----------------------------|-----------------|-----------------------------|-----------------|-----------------------------|-----------------|---------------|----------------|-------------|
| | | | | | | Temperature difference (°C) | Capacity (W/Hz) | Temperature difference (°C) | Capacity (W/Hz) | | | |
| SHRV-2 | 200 | 75 | 0.203 | 220V/50Hz/50Hz | 75 | 80 | 78 | 80 | 30 | 440*400*204 | 25 | |
| SHRV-3 | 300 | 75 | 0.133 | 220V/50Hz/50Hz | 75 | 65 | 78 | 70 | 45 | 608*607*270 | 37 | |
| SHRV-4 | 400 | 80 | 0.200 | 220V/50Hz/50Hz | 78 | 65 | 79 | 70 | 48 | 608*607*270 | 30 | |
| SHRV-5 | 500 | 80 | 0.230 | 220V/50Hz/50Hz | 79 | 66 | 79 | 71 | 50 | 1018*1027*270 | 41 | |
| SHRV-6 | 600 | 90 | 0.230 | 220V/50Hz/50Hz | 79 | 65 | 79 | 70 | 55 | 1018*1027*270 | 42 | |
| SHRV-8 | 800 | 100 | 0.410 | 220V/50Hz/50Hz | 79 | 60 | 78 | 70 | 62 | 1278*1027*288 | 68 | |
| SHRV-10 | 1000 | 130 | 0.510 | 220V/50Hz/50Hz | 78 | 67 | 78 | 71 | 64 | 1278*1027*288 | 79 | |
| SHRV-15 | 1500 | 160 | 1.00 | 380V/50Hz/50Hz | 78 | 67 | 78 | 72 | 68 | 1600*1205*340 | 200 | |
| SHRV-20 | 2000 | 170 | 1.50 | 380V/50Hz/50Hz | 79 | 68 | 79 | 70 | 60 | 1600*1470*340 | 225 | |
| SHRV-25 | 2500 | 180 | 2.00 | 380V/50Hz/50Hz | 78 | 67 | 78 | 71 | 62 | 1710*1400*350 | 240 | |
| SHRV-30 | 3000 | 200 | 2.50 | 380V/50Hz/50Hz | 79 | 67 | 80 | 70 | 64 | 1800*1400*340 | 270 | |
| SHRV-40 | 4000 | 220 | 2.40 | 380V/50Hz/50Hz | 78 | 67 | 79 | 71 | 66 | 1725*1400*350 | 285 | |
| SHRV-50 | 5000 | 240 | 3.00 | 380V/50Hz/50Hz | 79 | 66 | 80 | 70 | 66 | 1820*1780*350 | 290 | |
| SHRV-60 | 6000 | 320 | 3.60 | 380V/50Hz/50Hz | 78 | 67 | 79 | 72 | 66 | 1900*1980*350 | 360 | |
| SHRV-70 | 7000 | 240 | 3.60 | 380V/50Hz/50Hz | 78 | 67 | 79 | 72 | 67 | 2000*1980*350 | 360 | |
| SHRV-80 | 8000 | 320 | 4.00 | 380V/50Hz/50Hz | 84 | 67 | 84 | 76 | 66 | 2000*1780*350 | 390 | |
| SHRV-90 | 9000 | 340 | 5.00 | 380V/50Hz/50Hz | 80 | 67 | 80 | 74 | 70 | 2200*1900*320 | 410 | |
| SHRV-100 | 10000 | 350 | 6.00 | 380V/50Hz/50Hz | 82 | 67 | 82 | 78 | 78 | 2200*1900*320 | 440 | |

Notes: 1. Cooling test condition: indoor side 27°C DB, 19.5°C WB, outdoor fresh air 20°C DB, 21°C WB.
2. Heating test condition: indoor side 21°C DB, 15°C WB, outdoor fresh air 9°C DB, 5°C WB.
3. The above data may be changed without notice for future improvement on quality and performance.



VRF SYSTEM CONTROLLERS AND SOFTWARE



Wireless Remote Controllers



- Wireless remote controllers
- Indoor unit address inquiry
 - Indoor unit address setting
 - Temperature setting
 - Operation mode setting
 - Fan speed setting
 - Timer function

Wired Controllers



- Bidirectional communication. Indoor unit's operating parameters (error code, temperature, address) can be inquired and displayed on the controller.
- Compact design
- Timer function

Simple Centralized Controller



- Easy to install. Controller connects to outdoor units only.
- Able to install this controller after building decoration.
- 1 Controller can control max. 64 indoor units.
- Mode lock function, user can lock the running mode of indoor unit.

Doctor Kit Pro



- Operating status, error codes inquiry.
- Compressors, sensors, valves operating parameter, real-time monitored and display.
- Commissioning results can be reported.
- Built-in with troubleshooting instruction.