



United Technologies  
turn to the experts 

## Variable Refrigerant Flow System



# CARRIER XPOWER DC INVERTER VRF SYSTEM





### Indoor Units

Xpower VRF indoor unit



### Control Systems

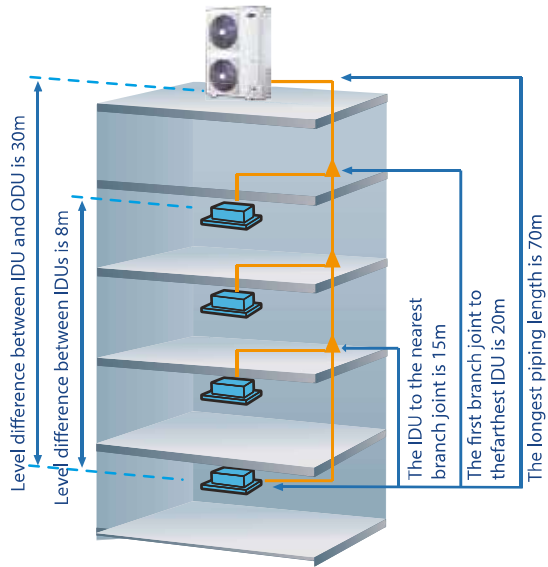
Smart control systems



# Xpower Mini VRF

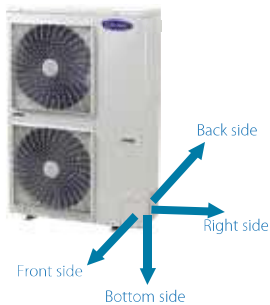
- » DC inverter compressor
- » DC fan motor
- » Capacity up to 45kW
- » Connectable indoor units quantity up to 15
- » Precise oil control technology
- » Advanced silence technology
- » Intelligent defrosting technology
- » Simple communication wiring
- » Auto addressing
- » Easy maintenance

## Long Piping Length >>



|   | 8-10.5kW | 12-18kW | 20-26kW | 40-45kW   |
|---|----------|---------|---------|-----------|
| Total piping length   | 100m     | 100m    | 120m    | 250m      |
| Longest length actual (Equivalent)                                | 45(50)m  | 60(70)m | 60(70)m | 100(120)m |
| Longest length after first branch                                 | 20m      | 20m     | 20m     | 40m       |
| Level difference between indoor and outdoor units - ODU up (down) | 30(20)m  | 30(20)m | 30(20)m | 30(20)m   |
| Level difference between indoor units                             | 8m       | 8m      | 8m      | 8m        |

## Four-Way Piping Connection >>



A four-direction space is available for connecting pipes and wiring in various installation sites.

# Xpower Mini VRF



## Specifications

| Capacity(HP)                |                  |            | 4  | 5           | 6           |
|-----------------------------|------------------|------------|--|-------------|-------------|
| Model 38VR                  |                  |            | 004H112010                                 | 005H112010  | 006H112010  |
| Power supply                |                  | V/Ph/Hz    | 220-240/1/50                               |             |             |
| Cooling                     | Capacity         | kW         | 12.3                                       | 14          | 15.5        |
|                             | Power input      | kW         | 3.25                                       | 3.95        | 4.52        |
|                             | EER              |            | 3.78                                       | 3.54        | 3.43        |
| Heating                     | Capacity         | kW         | 13.2                                       | 15.4        | 17          |
|                             | Power input      | kW         | 3.47                                       | 4.16        | 4.77        |
|                             | COP              |            | 3.8  | 3.7         | 3.56        |
| Connectable indoor unit     | Total capacity   |            | 45~130% of outdoor unit capacity           |             |             |
|                             | Max. quantity    |            | 6  | 6           | 7           |
| Compressor                  | Type             |            | Rotary                                     |             |             |
|                             | Quantity         |            | 1  | 1           | 1           |
| Fan motor                   | Type             |            | DC Motor                                   |             |             |
|                             | Quantity         |            | 2  | 2           | 2           |
| Refrigerant                 | Type             |            | R410A                                      |             |             |
|                             | Factory charging | kg         | 3.3  | 3.9         | 3.9         |
| Pipe connections            | Liquid pipe      | cm         | Ø 0.95                                     | Ø 0.95      | Ø 0.95      |
|                             | Gas pipe         | cm         | Ø 1.59                                     | Ø 1.59      | Ø 1.59      |
| Air flow rate               |                  | m³/s (CFM) | 1.67 (3530)                                | 1.67 (3530) | 1.67 (3530) |
| Sound pressure level        |                  | dB(A)      | 58   | 57          | 57          |
| Net dimension (WxHxD)       |                  | cm (m)     | 90 x 132.7 x 32<br>(0.90 x 1.33 x 0.32)    |             |             |
| Packing size (WxHxD)        |                  | cm (m)     | 103 x 145.6 x 43.5<br>(1.03 x 1.46 x 0.44) |             |             |
| Net weight                  |                  | kg         | 95   |             | 100         |
| Gross weight                |                  | kg         | 106  |             | 111         |
| Operating temperature range |                  | °C         | Cooling: -15 to 48°C; Heating: -15~27      |             |             |

**Notes:**

Capacities are based on the following conditions:

Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB.

Piping length: Interconnecting piping length is 7.5m, level difference is zero.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1m above the floor.

# Xpower Mini VRF



## Specifications

| Capacity(HP)                |                  |            | 4  | 5          | 6          | 6.5         |
|-----------------------------|------------------|------------|--|------------|------------|-------------|
| Model 38VR                  |                  |            | 004H119010                                 | 005H119010 | 006H119010 | *007H11901S |
| Power supply                |                  | V/Ph/Hz    | 380-415/3/50                               |            |            |             |
| Cooling                     | Capacity         | kW         | 12.3                                       | 14         | 15.5       | 17.5        |
|                             | Power input      | kW         | 3.25                                       | 3.95       | 4.52       | 5.3         |
|                             | EER              |            |  | 3.78       | 3.54       | 3.43        |
| Heating                     | Capacity         | kW         | 13.2                                       | 15.4       | 17         | 19          |
|                             | Power input      | kW         | 3.47                                       | 4.16       | 4.78       | 5           |
|                             | COP              |            |  | 3.8        | 3.7        | 3.56        |
| Connectable indoor unit     | Total capacity   |            | 45~130% of outdoor unit capacity           |            |            |             |
|                             | Max. quantity    |            | 6  | 6          | 7          | 9           |
| Compressor                  | Type             |            | Rotary                                     |            |            |             |
|                             | Quantity         |            | 1  | 1          | 1          | 1           |
| Fan motor                   | Type             |            | DC motor                                   |            |            |             |
|                             | Quantity         |            | 2  | 2          | 2          | 2           |
| Refrigerant                 | Type             |            | R410A                                      |            |            |             |
|                             | Factory charging | kg         | 3.3  | 3.9        | 3.9        | 4.5         |
| Pipe connections            | Liquid pipe      | cm         | Ø 0.95                                     | Ø 0.95     | Ø 0.95     | Ø 0.95      |
|                             | Gas pipe         | cm         | Ø 1.59                                     | Ø 1.59     | Ø 1.59     | Ø 1.91      |
| Air flow rate               |                  | m³/s (CFM) | 1.67(3529)                                 | 1.67(3529) | 1.67(3529) | 1.89 (4002) |
| Sound pressure level        |                  | dB(A)      | 57   | 57         | 57         | 59          |
| Net dimension (WxHxD)       |                  | cm (m)     | 90 x 132.7 x 32<br>(0.90 x 1.33 x 0.32)    |            |            |             |
| Packing size (WxHxD)        |                  | cm (m)     | 103 x 145.6 x 43.5<br>(1.03 x 1.46 x 0.44) |            |            |             |
| Net weight                  |                  | kg         | 95   |            | 102        | 107         |
| Gross weight                |                  | kg         | 106  |            | 113        | 118         |
| Operating temperature range |                  | °C         | Cooling: -15 to 48°C; Heating: -15~27      |            |            |             |

### Notes:

Capacities are based on the following conditions:

Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB.

Piping length: Interconnecting piping length is 7.5m, level difference is zero.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1m above the floor.

\* Please contact local Carrier sales company for more information and restrictions for this model 38VR007H11901S.

# Xpower Mini VRF



## Specifications

| Capacity(HP)                |                  |         | 7  | 8          | 10         | 12   | 14                                       | 16                                       |
|-----------------------------|------------------|---------|--|------------|------------|--|--|--|
| Model 38VR                  |                  |         | 007H119010                                 | 008H119015 | 010H119015 | 012H119015                                 | 014H119015                               | 016H119015                               |
| Power supply                |                  | V/Ph/Hz | 380-415/3/50                               |            |            |  |  |  |
| Cooling                     | Capacity         | kW      | 20.0                                       | 22.4       | 26.0       | 33.5                                       | 40.0                                     | 45.0                                     |
|                             | Power input      | kW      | 6.1  | 6.8        | 7.6        | 9.85                                       | 11.9                                     | 13.6                                     |
|                             | EER              |         | 3.28                                       | 3.29       | 3.42       | 3.4  | 3.35                                     | 3.32                                     |
| Heating                     | Capacity         | kW      | 22.0                                       | 24.5       | 28.5       | 33.5                                       | 45.0                                     | 50.0                                     |
|                             | Power input      | kW      | 6.1  | 5.9        | 6.8        | 8.38                                       | 11.1                                     | 12.7                                     |
|                             | COP              |         | 3.61                                       | 4.15       | 4.19       | 4  | 4.05                                     | 3.93                                     |
| Connectable indoor unit     | Total capacity   |         | 50~130% of outdoor unit capacity           |            |            |  |  |  |
|                             | Max. quantity    |         | 10   | 11         | 12         | 13   | 14                                       | 15                                       |
| Compressor                  | Type             |         | DC inverter                                |            |            |  |  |  |
|                             | Quantity         |         | 1  | 1          | 1          | 1  | 2  | 2  |
| Fan motor                   | Type             |         | DC motor                                   |            |            | DC Motor                                   | DC Motor + AC Motor                      |  |
|                             | Quantity         |         | 2  | 2          | 2          | 2  | 2  | 2  |
| Refrigerant                 | Type             |         | R410A                                      |            |            |  |  |  |
|                             | Factory charging | kg      | 4.8  | 6.2        | 6.2        | 7.5  | 9  | 12                                       |
| Pipe connections            | Liquid pipe      | cm      | Ø 0.95                                     | Ø 0.95     | Ø 0.95     | Ø 1.27                                     | Ø 1.27                                   | Ø 1.27                                   |
|                             | Gas pipe         | cm      | Ø 1.91                                     | Ø 1.91     | Ø 2.22     | Ø 2.22                                     | Ø 2.22                                   | Ø 2.54                                   |
| Air flow rate               | m³/s (CFM)       |         | 3.05(6470)                                 | 2.92(6177) | 2.92(6177) | 3.01(6378)                                 | 4.6(9750)                                | 4.6(9750)                                |
| Sound pressure level        | dB(A)            |         | 59   | 59         | 60         | 62   | 62                                       | 62                                       |
| Net dimension (WxHxD)       | cm (m)           |         | 112 x 155.8 x 40<br>(1.12 x 1.56 x 0.40)   |            |            | 112 x 155.8 x 52.8<br>(1.12 x 1.56 x 0.53) | 136 x 165 x 54<br>(1.36 x 1.65 x 0.54)   | 146 x 165 x 54<br>(1.46 x 1.65 x 0.54)   |
| Packing size (WxHxD)        | cm (m)           |         | 127 x 157.5 x 48<br>(1.27 x 1.58 x 0.48)   |            |            | 127 x 172 x 56.5<br>(1.27 x 1.72 x 0.57)   | 145 x 178.5 x 56<br>(1.45 x 1.79 x 0.56) | 155 x 178.5 x 56<br>(1.55 x 1.79 x 0.56) |
| Net weight                  | kg               |         | 137  | 146.5      | 147        | 157  | 240                                      | 275                                      |
| Gross weight                | kg               |         | 153  | 162.5      | 163        | 173  | 260                                      | 290                                      |
| Operating temperature range | °C               |         | Cooling: -15 to 46°C; Heating: -15 to 24°C |            |            | Cooling: -5 to 48°C; Heating: -15 to 24°C  |  |  |

**Notes:**

Capacities are based on the following conditions:

Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB.

Piping length: Interconnecting piping length is 7.5m, level difference is zero.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.