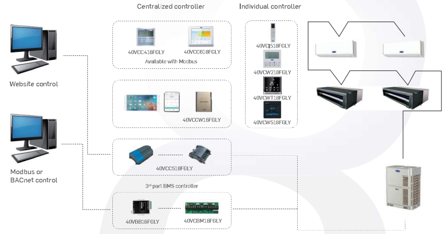
CONTROLLER LINE-UP



ACCESSORLES

Your VRF System of Choice

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XCT8

Variable Refrigerant Flow System

3 TO 32 HP
27.3 TO 307.1kBtu/h

2022 Latin America Catalogue

XCT8 Series Variable Refrigerant Flow System
Nice Solution of HVAC Application

The Carrier's XCT8 VRF system is adapted with the concept of healthy building with the high efficiency and flexible combination which can meet different requirements of commercial HVAC application.
XCT8 VRF system adopts environment-friendly refrigerant R410A, full inverter system including the compressor and DC motor, and the refrigerant cooling technology to make the system more stable and achieves better performance.

HIGH EFFICIENCY

The Carrier XCT8 VRF system is designed with multiple high efficiency technologies to reduce the energy consumption.

- Inverter compressor with more precise PMV control which can adjust the frequency at 1Hz, to achieve operating on demand, at most optimal load.
- Adapted the brushless DC motor with stepless control based on the system pressure and temperature and low-pressure air management system to reduce the wastage of energy consumption.
- Golden fin and inner grooved copper pipe design of heat exchanger enables better exchange efficiency.
- EVI technology and two-stage sub cool to enhance the performance*

* Only for the 380-415V HP series

HIGH RELIABILITY

The Carrier XCT8 VRF system equips numbers of devices and advanced technologies to ensure the system stability.

- Refrigerant liquid cooling technology can rapidly cool down inverter PCB, provides IPM stable operating conditions, even at high ambient temperature and high frequency operation of compressor.
- The rotation operation of outdoor module balances the life span of each module, which also extend the life span of whole system*
- Multi temperature sensors and pressure sensors detect the system operating status to ensure the system operates in best state.
- The intelligent defrost and oil return program protecting the compressor and contributing to the system performance as well.

* Only for the top-discharged series

BENEFIT FOR INSTALLATION AND SERVICE

Flexible design and ease of installation are the key point of XCT 8, to relief the installer and maintenance team from hassle.

- One button trial operation automatically detects system connection, saves trial operation and commissioning time.
- The wireless communication between the indoor unit and the outdoor unit saves the wiring installation work and cost.
- The refrigerant auto charge function reduces the commissioning time.
- There is a "Black box" function to record the history error code of outdoor PCB for for easy maintenance. And it has the service window on the panel to check parameters, no need to remove the plate panel*
- The intelligent diagnose and troubleshooting service software helps to reduce the downtime of problem unit.

* Only for the top-discharged series

TOP-DISCHARGED SERIES

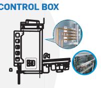
DC INVERTER COMPRESSOR

The Carrier XCT8 module VRF system is adapted with the full DC inverter compressor and 180° sine wave DC inverter control technology of IPM board to stepless control the compressor from 30 - 420 Hz to suit different capacity demands.
The EVI compressor and technology are used for the heat pump series to improve the heating performance and enhance the working condition down to -25℃ in heating mode.
What's more, the EVI technology adapts the economizer to have the second step super-cool in cooling mode and enhance the heating capacity performance in low ambient temperature in heating mode.

DC BRUSHLESS FAN MOTORIZED AXIAL FAN BLADE

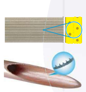
The Carrier XCT8 module VRF system is adapted with the high efficiency DC brushless fan motors which are controlled according to the outdoor ambient temperature, pressure, refrigerant temperature to keep the system in the best running status.
In order to have the best performance of the system, the Carrier XCT8 VRF system is designed with special fan blade and air system to enhance the air flow volume while reducing the noise. Such as the thickened front edge, outer edge turn-over, tail edge cut, concave and anti-resonance blade, etc.

ELECTRONIC CONTROL BOX



For the electronic box, the Carrier XCT8 module VRF system has compact design and rotary separated layers which benefits the configuration and service.
What's more, the Carrier XCT8-controlled PCB is highly integrated in design to reduce wiring and improve reliability.
The refrigerant cooling technology of compressor IPM board is adapted to help the IPM board more reliable in extreme condition to enhance the outdoor ambient working condition.

GOLDEN FIN HEAT EXCHANGER

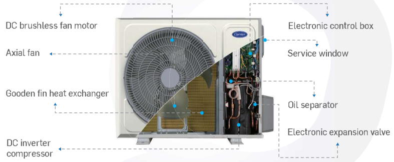


The Carrier XCT8 VRF system uses the high-efficiency cross-flow, low-pressure loss and anti-corrosion golden hydrophilic fins to strengthen the fin heat exchange process and improve the heat exchange efficiency which has nice corrosion resistance, and is not easy to scale to have a long service life.
In additional, the XCT8 VRF system is designed with the cross-toothed internal thread copper tube to increase the heat exchange area of the inner wall and destroy the boundary layer of the refrigerant flow, enhance the disturbance, make the heat exchange more sufficiently, and significantly improve the heat exchange capacity.

OIL SEPARATOR AND GAS-LIQUID SEPARATOR

The Carrier XCT8 VRF system is designed with oil separator and gas-liquid separator to promise the long piping connection.
It is designed with the high efficiency oil separator to separate the oil and refrigerant and take oil back to the compressor to protect the compressor.
And Carrier XCT8 VRF also takes the gas-liquid separator in the suction pipe of compressor to separate the gas-phase & liquid phase refrigerant and store the liquid-phase refrigerant to avoid liquid impact on the compressor.

SIDE-DISCHARGED SERIES



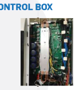
DC INVERTER COMPRESSOR

The Carrier XCT8 Mini VRF system is adapted with the full DC inverter compressor and 180° sine wave DC inverter control technology of IPM board to stepless control the compressor to suit different capacity demands.
Use the twin-rotary compressor with the high efficiency oil separator part to keep the compressor running in high reliability and low noise.

DC BRUSHLESS FAN MOTORIZED AXIAL FAN BLADE

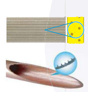
The Carrier XCT8 module VRF system is adapted with the high efficiency DC brushless fan motors which are controlled according to the outdoor ambient temperature, refrigerant temperature to keep the system in the best running status.
In order to have the best performance of the system, the Carrier XCT8 VRF system is designed with low-pressure dropping fan blade and air system to enhance the air flow volume while reducing the noise.

ELECTRONIC CONTROL BOX



For the electronic box, the Carrier XCT8 Mini VRF controlled PCB is highly integrated in design (only one PCB) to reduce the wiring and improve the reliability which benefits the configuration and service.
What's more, the refrigerant cooling technology of compressor IPM board is adapted to help the IPM board more reliable in extreme conditions to enhance the outdoor ambient working condition.

GOLDEN FIN HEAT EXCHANGER



The Carrier XCT8 VRF system uses the high-efficiency cross-flow, low-pressure loss and anti-corrosion golden hydrophilic fins to strengthen the fin heat exchange process and improve the heat exchange efficiency which has nice corrosion resistance, and is not easy to scale to have a long service life.
In additional, the XCT8 VRF system is designed with the cross-toothed internal thread copper tube to increase the heat exchange area of the inner wall and destroy the boundary layer of the refrigerant flow, enhance the disturbance, make the heat exchange more sufficiently, and significantly improve the heat exchange capacity.

OIL SEPARATOR AND GAS-LIQUID SEPARATOR

The Carrier XCT8 VRF system is designed with oil separator and gas-liquid separator to promise the long piping connection.
It is designed with the high efficiency oil separator to separate the oil and refrigerant and take oil back to the compressor to protect the compressor.
And Carrier XCT8 VRF also takes the gas-liquid separator in the suction pipe of compressor to separate the gas-phase & liquid phase refrigerant and store the liquid-phase refrigerant to avoid liquid impact on the compressor.

TOP-DISCHARGED HEAT PUMP SERIES

- 380-415V/3PH/50&60Hz
- 8 to 32 HP (25.2 to 90 kW)
- R410A refrigerant
- Free combination with 3 models, up to 96 HP (270 kW)
- Max. 100 IDUs can be connected under one system

TOP-DISCHARGED COOLING ONLY SERIES

- 208-230V/3PH/60Hz
- 8 to 20 HP (25.2 to 56kW)
- R410A refrigerant
- Free combination with 4 models, up to 88HP (246kW)
- Max. 64 IDUs can be connected under one system

INDOOR UNIT FLOOR - CEILING

- 208-230V/1PH/50&60Hz
- 12.3 to 54.5kBtu/h (3.6 to 16kW)
- AC motor
- Flexible installation for floor standing or ceiling mounted

INDOOR UNIT VERTICAL DUCT

- 208-230V/1PH/60Hz
- 24.2 to 54.5kBtu/h (7.1 to 16kW)
- AC motor
- 50Pa as standard ESP
- Thermal insulated cabinet to reduce heat loss
- Vertical installation meets required commercial market

SIDE-DISCHARGED HEAT PUMP SERIES

- 208-230V/1 PH/50&60 Hz for single fan
- 380-415V/3 PH/50&60 Hz for dual fan
- 3 to 12 HP (8 to 33.5kW)
- R410A refrigerant
- Max. 19IDUs can be connected under one system

INDOOR UNIT HI-WALL

- 208-230V/1PH/50&60Hz
- 7.5 to 24.2kBtu/h (2.2 to 7.1kW)
- DC motor
- Compact and pearl while panel, which is suitable for more diversified decoration styles

INDOOR UNIT LOW ESP DUCT

- 208-230V/1PH/50&60Hz
- 7.5 to 24.2kBtu/h (2.2 to 7.1kW)
- DC motor
- 30Pa as standard ESP
- Low noise, and concealed installation.

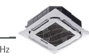
INDOOR UNIT MEDIUM ESP DUCT

- 208-230V/1PH/50&60Hz
- 24.2 to 51.2kBtu/h (7.1 to 15kW)
- DC motor
- 50Pa as standard ESP

INDOOR UNIT COMPACT CASSETTE

- 208-230V/1PH/50&60Hz
- 7.5 to 54.5kBtu/h (2.2 to 4.5kW)
- DC motor
- Compact design,suit for small room application

INDOOR UNIT CASSETTE



- 208-230V/1PH/50&60Hz
- 9.6 to 54.5kBtu/h (2.8 to 16kW)
- DC motor
- Compact size, suitable for office and hall application

INDOOR UNIT HIGH ESP DUCT

- 208-230 V/1 PH/50&60 Hz for capacity up to 28kW
- 208-230 V/3 PH/60 Hz (380-415 V/3 PH/50 Hz) for capacity above 28kW 24.2 to 191kBtu/h (7.1 to 56kW)
- AC motor (DC motor for 20-28kW)
- Max. ESP 250 Pa (35-56kW)
- High static pressure enables flexible installation of long air duct and more diffusers.

INDOOR UNIT FRESH AIR PROCESSOR

- 208-230 V/1 PH/50&60 Hz for capacity up to 28kW
- 208-230 V/3 PH/60 Hz for capacity above 28kW
- 47.8 to 191kBtu/h (14 to 56kW)
- AC motor
- Introducing of fresh air helps to create a healthier indoor environment.