



## AHU DX KITS CONNECTION

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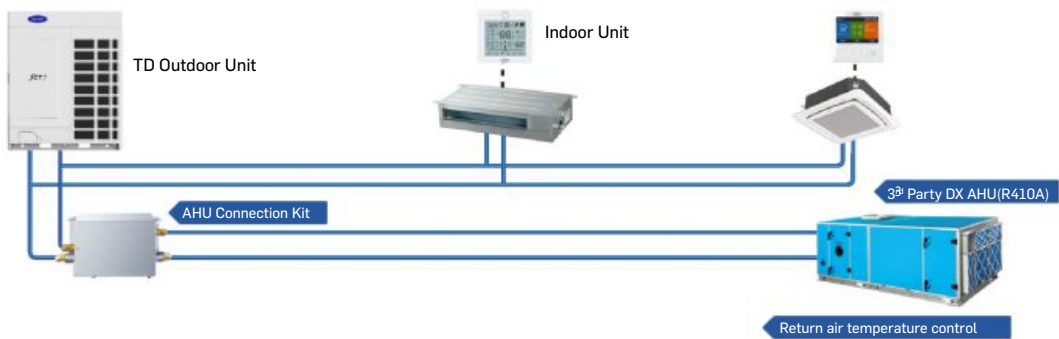
AHU Kit



## Air Handling Unit DX Coil kit (TA Control)

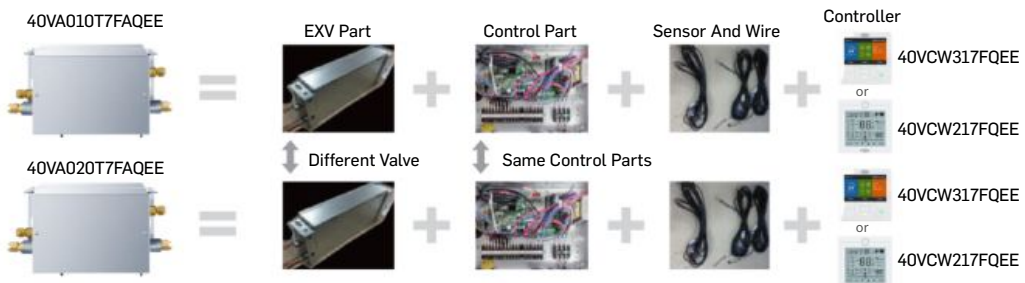
### Easy Installation

- Carrier offers a range of connection kits to connect VRF outdoor units to 3rd party DX AHU (R410A)
- 2 connections are possible:
  - Mixed with VRF indoor units, AHU capacity should less than 30% of total capacity
  - AHU alone
- In both cases (50% < indoor Max connection ratio < 100%)
- Compatible to XCT7 Top Discharge up to 60HP (3 kits) & XCT7 Side Discharge (8/10/12HP)
- Compatible with all XCT7 VRF control solutions

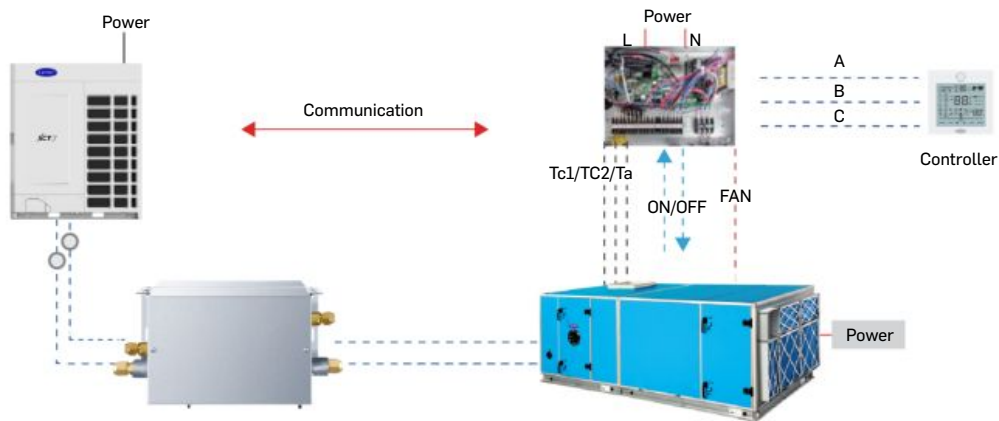


### AHU Kit Configuration

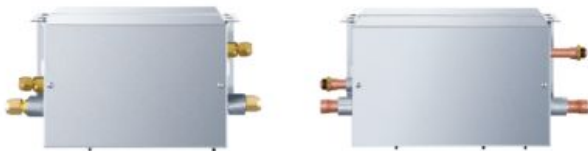
Carrier's AHU connection kit consists the following 4 parts, where controller is optional:



## AHU Connection Kit Control



## Specifications (TA control)



Model	40VA010T7FAQEE	40VA020T7FAQEE
Connected AHU Capacity	14 ≤ x ≤ 28 kW (5-10 HP)	28 < x ≤ 56kW (10-20 HP)
Power Supply (Ph/V/Hz)	1/220~240/50/60	1/220~240/50/60
Dimensions (mm)(L x H x W)	(350 x 226 x 155)	(433 x 296 x 193)
Shipping Dimensions (mm)(L x H x W)	(606 x 295 x 209)	(667 x 365 x 249)
Material	Galvanized steel	Galvanized steel
Weight (kg)	6	8
Shipping Weight (kg)	10	13
Liquid Pipe (mm)	9.52 (Main) / 12.7	12.7 (Main) / 15.88
Gas Pipe (mm)	25.4 (Main) / 22.2 / 19.05	28.58 (Main) / 25.4 / 22.22
Pipe Connection Method	Flare connection and welding	Flare connection and welding
AHU Kit - AHU Coil Max Single Pipe Length (m)	5	5
AHU Kit - AHU Coil Max Height Difference (m)	5	5



AHU Kit



## Air Handling Unit DX Kit (DDC Control)

### System Introduction

Carrier offers a range of connection kits to connect XCT7 outdoor units to 3rd party DX AHU, with DDC control configuration

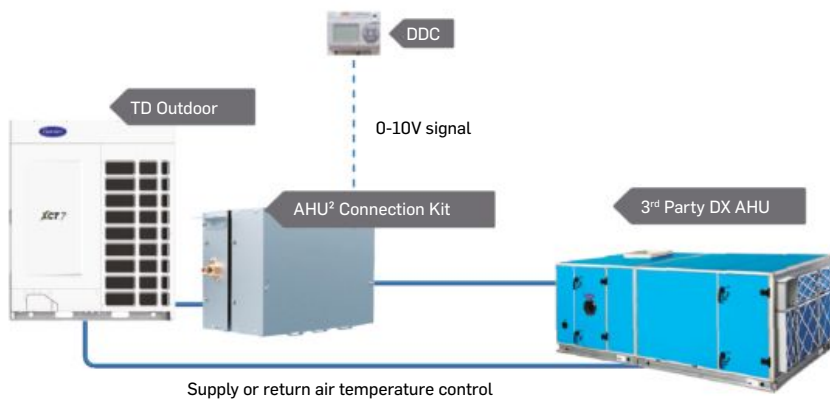
2 connections are possible:

- Mixed with VRF indoor units, AHU capacity should less than 30% of total capacity
- AHU alone

In both cases (50% < indoor Max connection ratio < 100%)

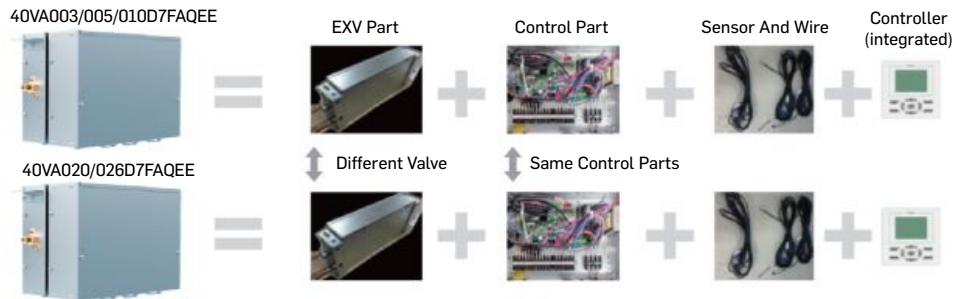
Compatible to XCT7 top discharge up to 104HP (4 kits) & XCT7 side discharge (4 to 12HP)

Compatible with all XCT7 VRF control solutions



## AHU Kit Configuration

Carrier 2nd generation AHU kit also contains the following 4 parts:

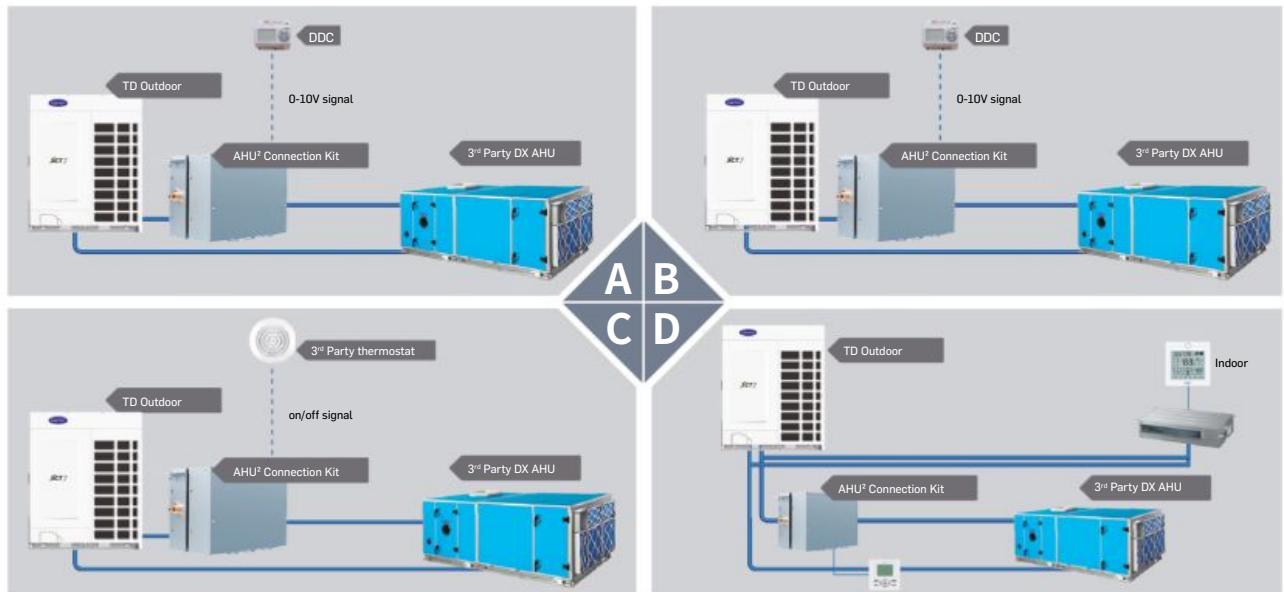


## Control Solutions

Four control methods can be used, which can be switched by dip switch based on the site scenario

### Control solution for application with the 3rd party AHU with DDC controller

- Supply air temperature or return air temperature controllable
- Control AHU by temperature sensors and 0-10 V signal of DDC controller which is supplied locally
- Similar to B control solution, the difference is unproportional 0-10V algorithm for outdoor units capacity control
- Supply air temperature or return air temperature controllable
- Control AHU by temperature sensors and 0-10V signal of DDC controller which are supplied locally
- Similar to A control solution, more accurate temperature control than A



### Control solution for application with 3<sup>rd</sup> party thermostat instead of DDC

- No additional DDC controller required
- Simple and cheap
- Indirect room temperature control

### Control solution for system integrating 3<sup>rd</sup> part AHU with other VRF

- Control the AHU as a VRF indoor units



AHU Kit



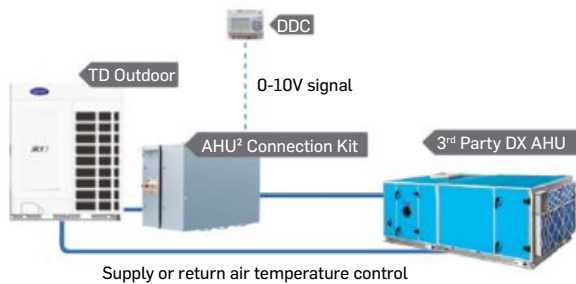
## UNIT STRUCTURE

### Features

- Extend the AHU connected capacity per kit, ranging from 3.5 kW to 73 kW, which can meet small, medium and large buildings demands
- Add the 0-10V signal control, for DDC configuration
- Supply air temperature or return air temperature controllable
- Remove the gas pipe, more convenient for installation
- Save space through compact design

### DDC or TA control

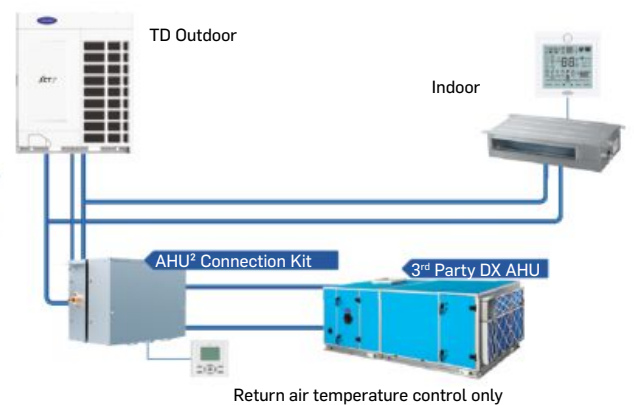
40VA\_D7FAQEE



VS

### TA control only

40VA\_T7FAQEE





### Specifications (DDC control)



40VA003D7FAQEE  
40VA005D7FAQEE  
40VA010D7FAQEE



40VA020D7FAQEE  
40VA026D7FAQEE

Model	40VA003D7FAQEE	40VA005D7FAQEE	40VA010D7FAQEE	40VA020D7FAQEE	40VA026D7FAQEE
Connected AHU Capacity	3.5 ≤ x ≤ 7 kW (1-3HP)	7 < x ≤ 14 kW (3-5HP)	14 ≤ x ≤ 28 kW (5-10HP)	28 < x ≤ 56 kW (10-20HP)	56 < x ≤ 73 kW (20-26HP)
Power Supply (Ph/V/Hz)	1/220~230/50/60	1/220~230/50/60	1/220~230/50/60	1/220~230/50/60	1/220~230/50/60
Dimensions (mm)(L x H x W)	(420 x 260 x 165)	(420 x 260 x 165)	(420 x 260 x 165)	(420 x 260 x 165)	(420 x 260 x 165)
Shipping Dimensions (mm)(L x H x W)	(520 x 340 x 225)	(520 x 340 x 225)	(520 x 340 x 225)	(520 x 340 x 275)	(520 x 340 x 275)
Material	Galvanized Steel	Galvanized Steel	Galvanized Steel	Galvanized Steel	Galvanized Steel
Color	Grey	Grey	Grey	Grey	Grey
Weight (kg)	5.5	5.5	5.5	6.5	6.5
Shipping Weight (kg)	8	8	8	12	12
Liquid Pipe (mm)	9.52 (Main) / 6.35	9.52 (Main) / 6.35	9.52 (Main) / 6.35	12.7 (Main) / 15.88	12.7 (Main) / 15.88
AHU Kit – Indoor Units Max Single Pipe Length (m)	5	5	5	5	5
AHU Kit – Indoor units Max Drop (m)	5	5	5	5	5



Turn to the experts

