



### AHU DX KITS CONNECTION

123	TA CONTROL	TYPF
120		

125 DDC CONTROL TYPE

127 UNIT STRUCTURE



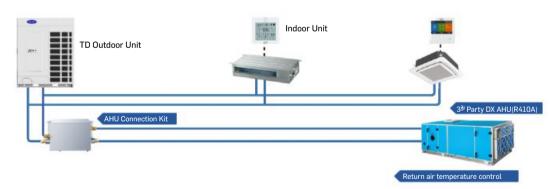




# Air Handling Unit DX Coil kit (TA Control)

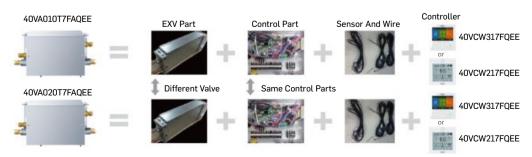
#### **Easy Installation**

- 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%)</li>
- Compatible to XCT7 Top Discharge up to 60HP (3 kits) & XCT7 Side Discharge (8/10/12HP)
- Compatible with all XCT7 VRF control solutions



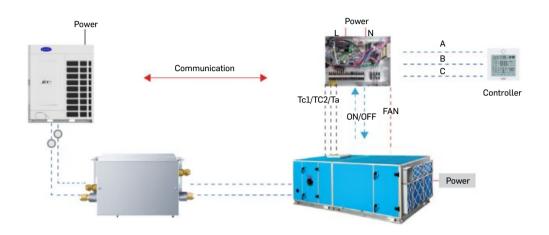
#### **AHU Kit Configuration**

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

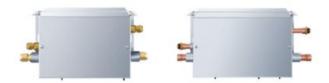




### **AHU Connection Kit Control**



### **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	







# Air Handling Unit DX Kit (DDC Control)

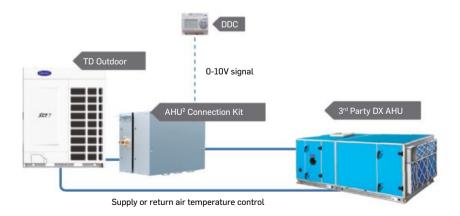
#### **System Introduction**

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

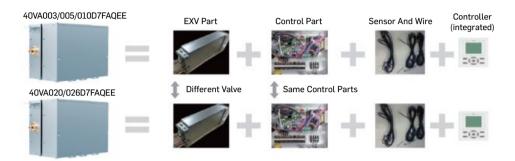
In both cases (50% < indoor Max connection ratio < 100%) Compatible to XCT7 top discharge up to 104HP (4 kits) & XCT7 side discharge (4 to 12HP) Compatible with all XCT7 VRF control solutions





#### **AHU Kit Configuration**

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

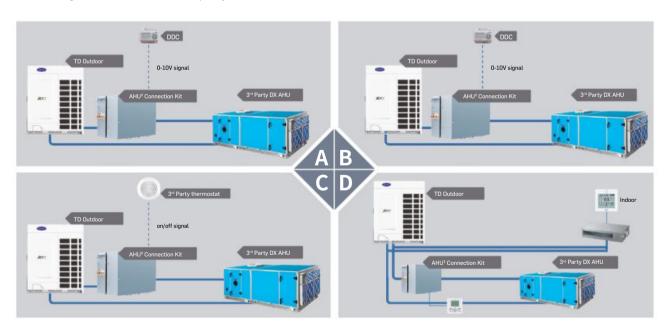


#### **Control Solutions**

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

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

· Control the AHU as a VRF indoor units



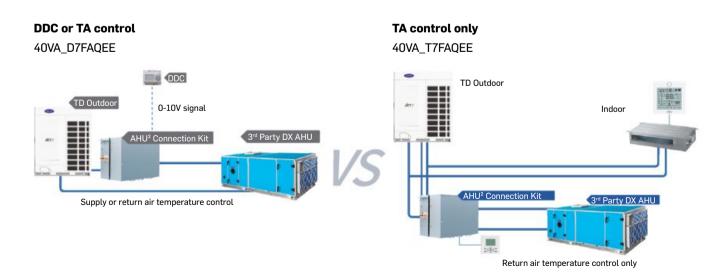




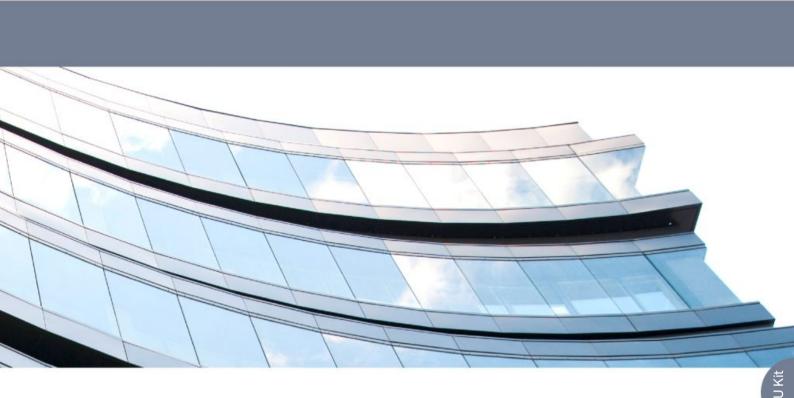
## **UNIT STRUCTURE**

### **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







### **Specifications (DDC control)**



40VA003D7FAQEE 40VA005D7FAQEE 40VA010D7FAQEE



40VA020D7FAQEE 40VA026D7FAQEE

Model	40VA003D7FAQEE	40VA005D7FAQEE	40VA010D7FAQEE	40VA020D7FAQEE	40VA026D7FAQEE
Connected AHU Capacity	$3.5 \le x \le 7 \text{ kW (1-3HP)}$	$7 < x \le 14 \text{ kW } (3-5\text{HP})$	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