

CONTROL SOLUTIONS

GET THE POWER OF WIRELESS SOLUTIONS



In addition to ensuring the quality of the air conditioners, these controls play a crucial role in the ease of use and efficiency of the units to give optimized settings for the perfect climate. Alongside local control options, Carrier offers a broad selection of central control systems or the choice to integrate in the building control system.

ONE CONTROL FOR EVERY USE



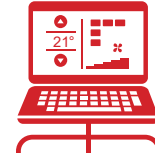
Local Controls

Cable remote controls (max. cable length 500m) or wireless infrared remote controls are used to control individual units or groups of up to 8 IDUs. Additional modules allow units to be controlled from any location via the Internet or applications.



Central Controls

VRF systems can be controlled from a preferred centralized location, such as the reception or plant room. Cable lengths can be max. 2,000m and up to 512 IDUs can be controlled.



Building Control Systems

Carrier air conditioners can be integrated with all conventional building control systems. This makes air conditioning a crucial aspect of a building's central control.

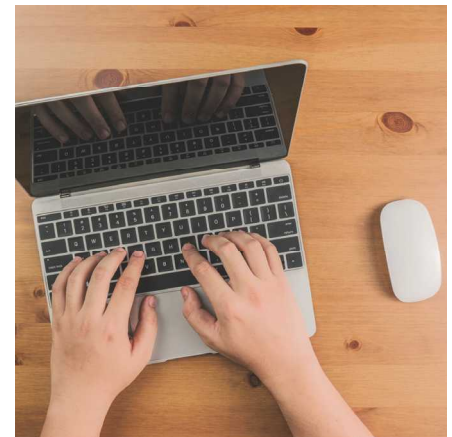
GET CONTROL, WHEREVER YOU ARE



On the cloud with Carrier In The Air app



Locally with standard remote control



Using Carrier Web Browser for all your facilities

TRUST THE TU2C-LINK

All control devices are connected to the air conditioner's side using Carrier's dedicated central control network, also known as the TU2C-LINK. It can be used to connect all equipment directly.

- Wiring:** 2-core, Non-polarity
- Type:** Shield wire
- Size/length:** • 1 to 1.5mm²/Up to 1,000m
• 2mm²/Up to 2,000m

INDIVIDUAL REMOTE CONTROLLER

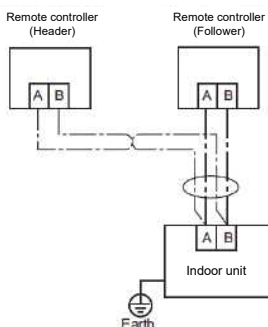
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CONTROL

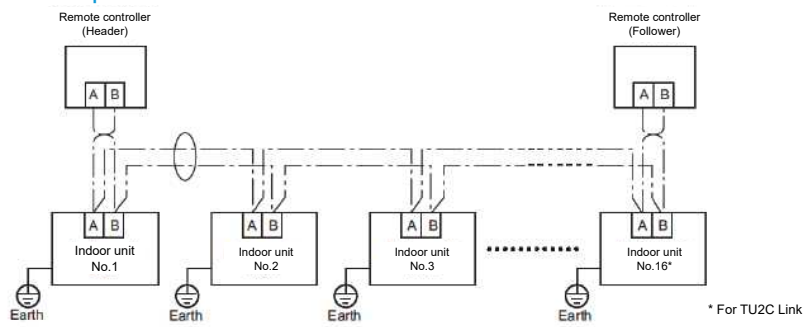
TYPE		INFRARED				WIRED		
Part number		40VDC-8-TEE	40VDC-8-TEE	40VCI-8-TEE	40VIC3-8-TEE	40VCW61-8-CEE	40VCW66-8-JEE	NRC-01HE
Picture								
Dimensions (HxWxD) in mm	Remote	157x56x19	157x56x19	157x56x19	157x56x19	86x86x16	120x120x20	120x120x16
	Infrared receiver	120x70x18	204x204x24	140x113x12	130x65			
Compatibility		All Indoor Units	4-Way Cassette	1-Way Cassette	Ceiling	All Indoor Units	All Indoor Units	Air-to-Air Heat Exchanger
Connectivity		1:1	1:1	1:1	1:1	1:16	1:16	1:8
Standard functions	On/Off	.	.	.	.	.	.	.
	Mode (Heating, Cooling, Ventilation, Dry, Auto)	.	.	.	.	.	.	.
	Temperature setting	• /17°C-30°C	• /17°C-30°C	• /17°C-30°C	• /17°C-30°C	• /18°C-29°C	• /18°C-29°C	• /18°C-29°C
	Fan speed (Auto, Manual 5 Speed)	.	.	.	.	.	.	.
	Air direction (Swing Mode or Manual Orientation)	.	.	.	.	.	.	.
Scheduling	Timer function	.	.	.	.	.	.	.
	Schedule function						.	
	Return back						.	
Advanced functions	Dual set point						.	
	Soft cooling						.	
	Night operation						.	
	Energy-saving function						.	.
	Frost protection						.	.
	Lock function						.	
	Summer time						.	
	Room naming						.	
Installation & maintenance	Dirty filter indication					.	.	
	Error display	.	.	.	.	.	.	.
	System settings					.	.	
	Indoor unit serial number						.	
Outputs	Error output					.	.	.
	External ventilation control						.	
Display & Interface	Interface	Icon	Icon	Icon	Icon	Icon	Menu	Icon
	Multilanguage						.	
	Luminous buttons						.	
	Backlight display						.	
Other	Temperature sensor					.	.	.
Communication protocol						TU2C-LINK	TU2C-LINK	TCC-LINK

Installation Drawings

Individual Controls



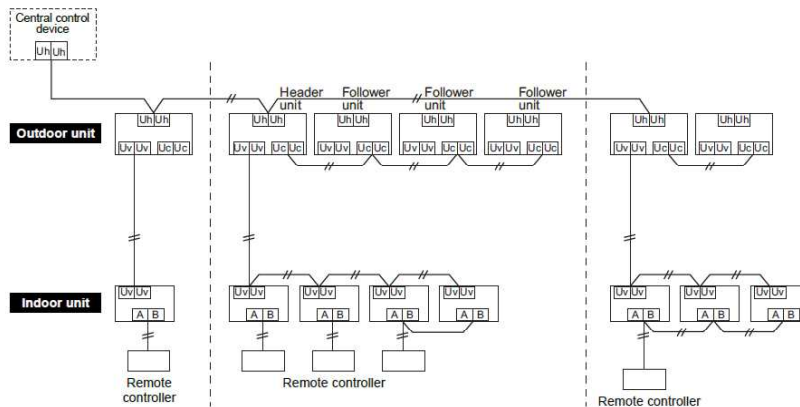
Group Controls



SMART SOLUTIONS

TYPE		WIRED	WI-FI INTERFACE
Part number		40VCC33-8FJEE	40VCIWF0010UCPE
Picture			
Dimensions (HxWxD) in mm		120x120x16	120x120x28
Compatibility		All Systems	All Indoor Units
Connectivity		1:64	1:1
Standard functions	On/Off	•	•
	Mode (Heating, Cooling, Ventilation, Dry, Auto)	•	•
	Temperature setting	•	•
	Fan speed (Auto, Manual 5 Speed)	•	•
	Air direction (Swing Mode or Manual Orientation)	•	•
Scheduling	Timer function		
	Schedule function	•	•
	Return back		
Advanced functions	Dual set point		
	Soft cooling		
	Energy-saving function		•
	Energy monitoring		
	Air purifier kit		•
	Room naming		•
Central control	Permit/prohibit function	•	
	Group control	•	•
Installation & maintenance	Dirty filter indication	•	
	Error display	•	•
	Error transfer by email		
	System settings	•	•
Display & Interface	Interface	Menu	
	Multilanguage	•	•
	Luminous buttons	•	
	Backlight display	•	
Other	Digital input/output		
	Web connection		
Communication protocol		TU2C-LINK	

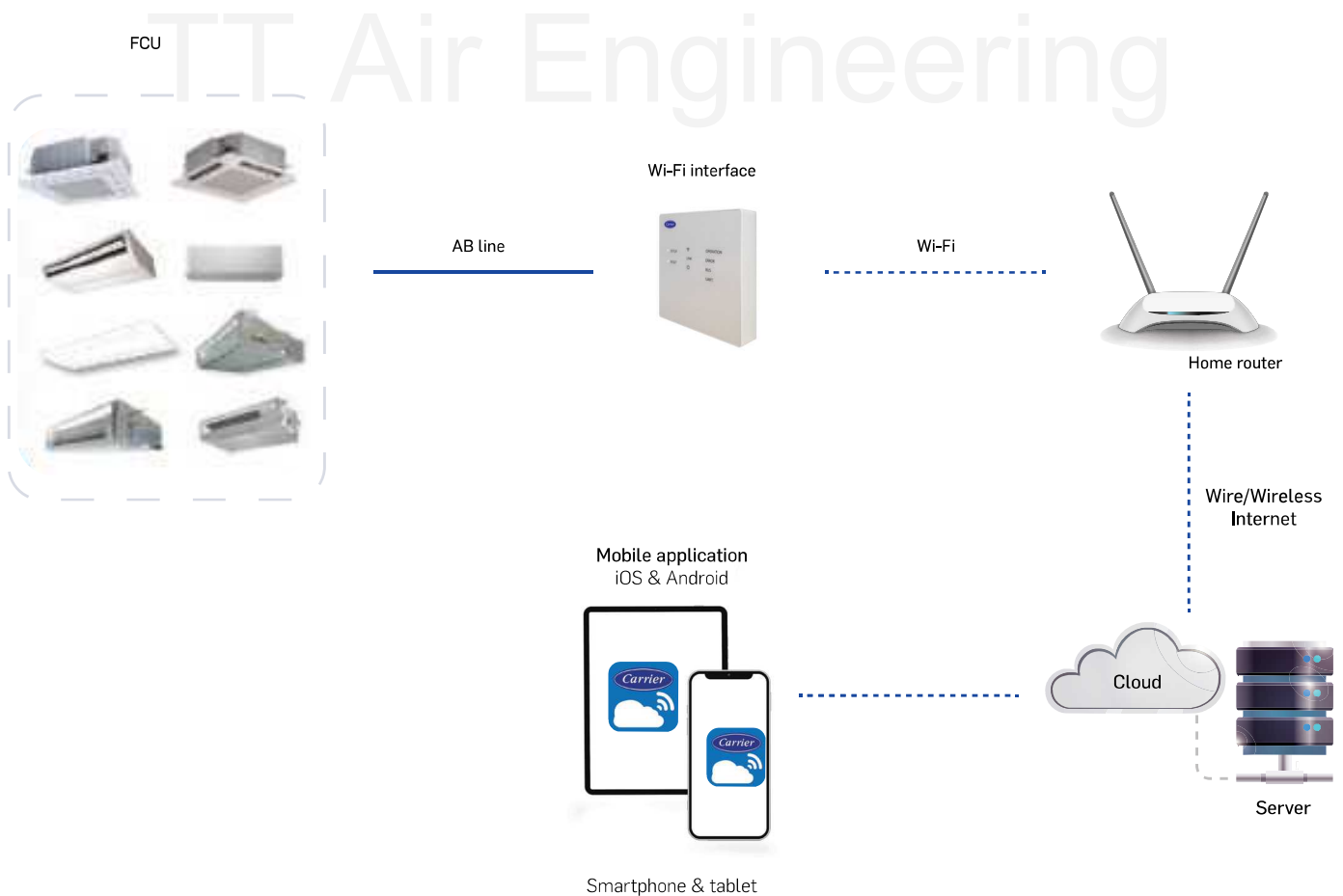
Drawings



Wi-Fi Interface Specification

Connector length	Maximum from FCU: 50m
Net weight	0.13kg
Operating temperature	0-50°C
Power input	from FCU via AB line
Power consumption	0.6W
Casing material	ABS UL94-HB
Wi-Fi	2.4GHz
Radio protocol	IEEE 802.11b/g/n

System Overview



ULTIMATE COOLING CONVENIENCE

Take control and cool your home from anywhere, anytime with Carrier's Wi-Fi solution. Connect to your air-conditioner network with the new **Carrier In The Air app**, available on iOS and Android, for a fast and convenient way to control the comforts of your home and monitor energy usage.



FCU can be controlled by up to 5 users.



Up to 16 IDUs can be controlled by 5 users, making it ideal for home and family applications.

All FCUs can be divided up to 3 groups.



Carrier In The Air

Available on:





SMART VOICE CONTROL

Tell Carrier how to cool your home with smart speaker voice control functions compatible with Google Home Assistant and Amazon Alexa.



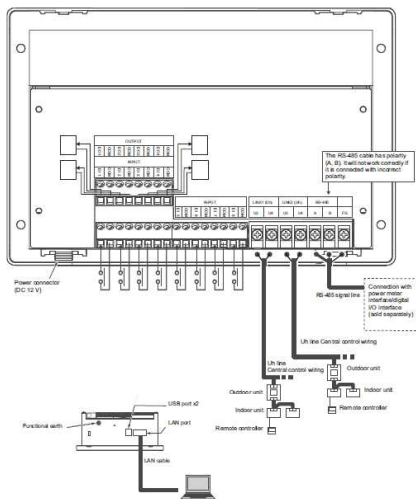
TOUCH SCREEN SOLUTIONS

CONTROL

Part number		Touch Screen Smart Manager	40VCC73-8FJEE	40VCC631SJEE
Picture				
Dimensions (HxWxD) in mm			205x136x90	255x323x49
Compatibility			All Indoor Units (except Hot Water Module, DX Kit, Fresh Air, Air-to-Air Heat Exchanger)	All Indoor Units TCS-NET relay interface required (BMS-IFLSV4E)
Connectivity			1:256	1:512
Screen	Type / Dimension		Capacitive color touch screen/7"	Capacitive color touch screen/12.1"
Standard functions	On/Off		•	•
	Mode (Heating, Cooling, Ventilation, Dry, Auto)		•	•
	Temperature setting		•	•
	Fan speed (Auto, Manual 5 Speed)		•	•
	Air direction (Swing Mode or Manual Orientation)		•	•
Scheduling	Timer function		•	•
	Schedule function		•	•
	Return back		•	•
Advanced functions	Dual set point		•	•
	Soft cooling		•	•
	Energy-saving function		•	•
	Energy monitoring		•	• (if power meter, BMS-IFWH5E interface relay required)
	Rooms naming			
Central control	Permit/prohibit function			
	Group control		•	•
Installation & maintenance	Dirty filter indication		•	•
	Error display		•	•
	Error transfer by email		•	•
	System settings		•	•
	Outputs	Digital input/output		•	• (Digital I/O BMS-IFDD03E required)
Display & Interface	Interface		Menu	Menu
	Multiple languages		•	•
	Backlight display		•	•
Communication protocol			TU2C-LINK	TCC-LINK

Installation Drawings

40VCC73-8FJEE



ADDITIONAL PCB

Additional PCB for Outdoor Units

Model name	Power peak-cut control board			External master On/Off control board			Output control board		
	TCB-PCDM4E	TCB-PCMO4E	TCB-PCIN4E						
Power peak cut control	•	•	•						
Power peak cut extend	•	•	•						
Snowfall fan control				•	•				
External master on/off control				•	•	•			
Night operations (sound reduction) control				•	•	•			
Operational mode selection control				•	•	•			
Error/operation output control							•	•	•
Compressor operation output							•	•	•
Operation rate display							•	•	•
Max. number installed	1	1	1	4	4	2	2	2	1
Type of digital input/output	2/1			6/-			-/8		

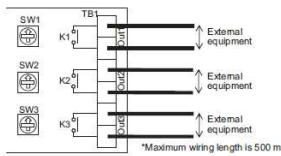
Additional PCB for Indoor Units

OPTIONAL CONNECTION KIT TCB-PCU2-E

SIGNAL

Output Terminal TB1

Signal outputs (including Mode, Fan Status, Alarm & Defrost) are extracted from OUT 1, OUT 2 and OUT 3.

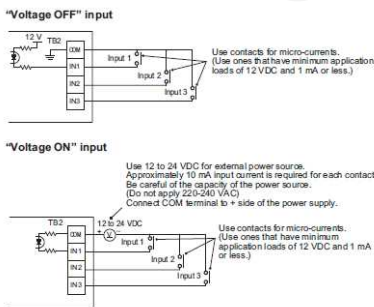


≪Connectable load≫
30 VDC/1 A or less
277 VAC/1 A or less

EXTERNAL

Digital Input Terminal TB2

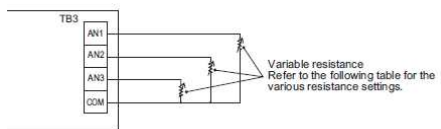
Stop air conditioner or lock local remote by signal input.



EXTERNAL

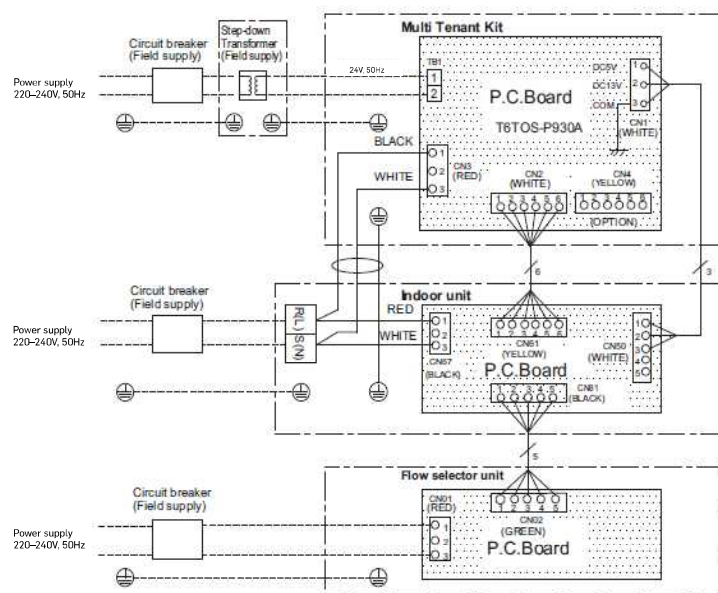
Analog Input Terminal TB3

Change the indoor unit's operation mode (AN1), set temperature (AN2), and blower setting (AN3) by connecting a variable resistor to the analog input terminal.



Multi-Tenant Kit TCB-PSMT1E



For multi-tenant application, this PCB maintains low voltage power during tenant absence when the main power supply for IDU is shut down.



GATEWAY

Features

CONTROL

Part number		40VCBM1-8FJEE	40VCBB1-8FJEE
Langage		Modbus®	BACnet®
Picture			
Dimensions (HxWxD) in mm		170x200x66	90x140x45
Compatibility		All Indoor Units (HWM, Air-to-Air Heat Exchanger excluded)	All Indoor Units (HWM excluded)
Connectivity	Max. number of indoor units	128	128
	Max. number of outdoor units	16	
	Max. number of gateways	15	1
Command	On/Off	R/W	R/W
	Accumulated operation time	R/W	
	Mode (Heating, Cooling, Ventilation, Dry, Auto)	R/W	R/W
	Temperature setting	R/W	R/W
	Fan speed (Auto, Manual 5 Speed)	R/W	R/W
	Air direction (Swing Mode or Manual Orientation)	R/W	R/W
	Soft cooling		
	Save operation		
	Dirty filter indication	R/W	R/W
	Room temperature	R	R
	Permitting/prohibiting of local operations	R/W	R/W
	Temperature setting range limitation	R/W	
	Error status	R	R
	Error Code	R	R
	Error address		
	Model name	R	
Serial number	R		
Indoor Unit capacity	R		
Indoor Unit type	R		
Protocol		Modbus® RTU	BACnet® IP
Infrastructure		RS-485	Lan cable (higher than category 5, UTP)
Requirements (locally supplied)		Modbus Master Device	
		Modbus Master Device	