



TGEV Series XPOWER



INVERTER



38TGEV0181-0241A1



38TGEV0301A1



38TGEV0361-0401A1



38TGEV0361-0481A3



ISO 9001 QMS18026/1686
ISO 14001 EMS18012/471
ISO 45001 OHSMS19061/078



TGEV series

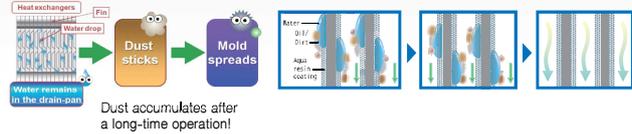
XPower is an energy-saving air conditioner for light commercial use that was designed to meet our customers' needs. Able to reduce the refrigerant volume and achieve a high Seasonal Energy Efficiency Ratio (SEER). Due to its compact size, the unit can even be installed in small shops. In addition, the unit is equipped with various standard features, such as an AUTO restart function for blackouts, to ensure stable operation.

XPower is a new type of air conditioner which, thanks to the above advantages can be used.

Self-clean operation with Aqua-resin coated coil

The mechanism of the wash-off by Acrylic coated indoor unit's fins.

- The "Aqua-resin" prevents dirt and oil from sticking on the fins.
- The dew condensation water flush out dirt and oil.
- A drying operation inhibits the propagation of mold after washing.



Energy Saving with Inverter System

Gives you high cooling performance with low power consumption. XPower is equipped with an inverter, and achieves a high part-load SEER value.

Outdoor operating temperature range

Outside temperature



Protection circuit

- New PCB controller it is completely designed to prevent dust, sand dirt and moisture. Stable Operation
- The Voltage range for $\pm 10\%$ from the normal operation
- Has the protection circuit to protect the PC board under unstable power supply* and a function that detects miss-wiring of the power supply for 3Phase product model

- Surge protection
Protection against external voltage surges
- LED check Error code
When there is a malfunction



MCC-1626 :
Control, LED check code, miss-wiring protection circuit.

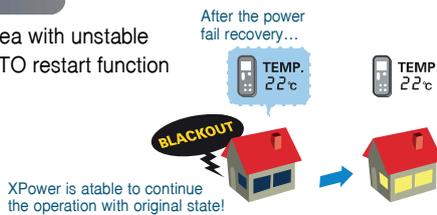


MCC-1627 :
Drive Comp & 3Phase product circuit, surge protection circuit.

*3Phase 380-400V $\pm 10\%$

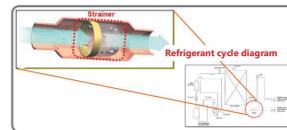
Auto restart function

For stable operation in area with unstable electricity, TGEV has AUTO restart function as standard for blackout.



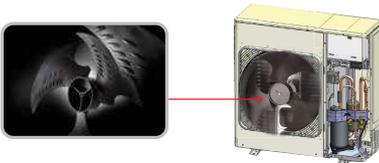
Strainer in gas pipe

XPower has the strainer in the gas pipe to remove the dust and metal-abrasion powder.



Bat Wing Fan

New development for high-pressure, low-volume fan. also the bat wing fan realizes low sound level.



Quiet operation

TGEV Series have been designed especially to operation very quietly, with noise levels which represents new comfort level for buildings.



Compressor

CARRIER, XPower product are combination of twin rotary compressor and all inverter driven control remain unchanged with new R32 refrigerant, contribute to guaranteed accuracy and expertise of flawless our quality. We tested to confirm our compressor and refrigerant part reliability are passed Carrier standard under R22 & R410A mineral oil, this also leads to flexible installation work, R22 & R410A existing pipe can be used.



Condensing unit

Aluminum Alloy

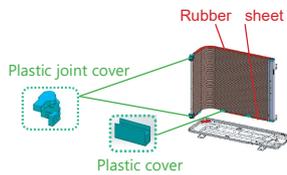
In general, the density of aluminum is one-third lighter of copper!
Specialized aluminum alloy adapted heat exchanger to prevent corrosion!

Fin guard installed

Strengthen safety by installing fin guard for additional protection HEX fin directly contact to installer or user

Plastic joint cover and rubber sheet installed

Longer life time operation by installing plastic joint cover and rubber sheet between aluminum alloy heat exchanger and steel part in condensing unit to reduce the corrosion



Twin Rotary compressor

Twin rotary compressor and all inverter driven control remain unchanged with new R32, contribute to quarantined accuracy and expertise of flawless carrier quality.



Sealed up inverter box

Inverter box of XPower is fully sealed up in order to void malfunction due to sand, dust and small animal.



Anti-Corrosion

With a new resistance corrosion aluminum alloy, Heat exchanger become highly durable. A salt spray test has been conducted to demonstrate the corrosion-resistant capability of our products in corrosive environments for a certain period of time.

Before testing



After testing



Normal

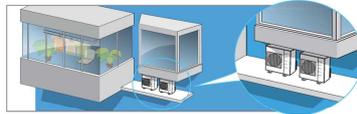
Under telescope

After undergoing an intensive Salt Spray test, the heat exchanger (PFC) is able to maintain its shape without corrosion, which strongly confirms its durability in a highly corrosive environment.

Compact chassis & light weight

Class No.1 for compact chassis

- Easy for carry and transportation
- Flexible to install on the balcony or on the wall by rack or angle



Wireless WIFI Interface Kit 40VCIWF0010UCPE (Option)

Smart Phone / Tablet, which is easy to use. No matter where you are, you can turn on-off, control the temperature with the Application "Carrier In The Air"



Under Ceiling Type



"For under-ceiling installation only"

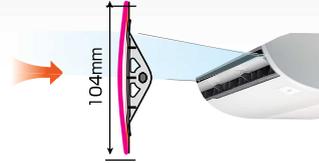
The air filter is located at the bottom of the machine.
Can be easily removed for cleaning

• New designed wide flap, easy servicable filter

The development of the soft cooling mode provides a new level of cooling to personalize the air flow intensity, angle and direction directly from the remote control and enjoy the indoor environment at the right temperature without being exposed to the direct cold draft.

The swing can distribute the wind thoroughly as needed. You can choose to use both modes. Adjust the swing up-down automatically or stop swinging in the desired position.

this vent has promoted
air distribution



• The new Drain tray is made of plastic.

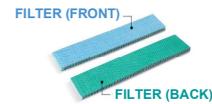
The drain tray does not corrode like metal but is still strong.

• Drain Pump kit (Option)

Anti-bacterial drain pump available.
Easy to install and to maintain
The design, possible solution,
where there is a lack of space.



• IAQ Filter Model TCB-ACFC1CPE (Option)



• Available in wireless or wired remote



Wireless remote controller
CARR-ACXU31CP-E



Wired remote controller**
40VCW56-8-JEE
(Option)



Wired remote controller**
CARR-AMT32E
(Option)



Wired remote controller
CARR-AMT0AE



Wired remote controller**
CARR-AMS0AE
(Option)

**Available as option.

Specification

Specification			Under Ceiling - Inverter control																	
Model Name	Outdoor Unit	38TGEV0181A1			38TGEV0241A1			38TGEV0301A1			38TGEV0361A1			38TGEV0361A3			38TGEV0481A3			
	Indoor Unit	42TGEV0181CP			42TGEV0241CP			42TGEV0301CP			42TGEV0361CP			42TGEV0361CP			42TGEV0481CP			
Cooling Capacity (Min. Hz./Rate Hz./Max Hz.)	Kw.	Min	Rate	Max	Min	Rate	Max	Min	Rate	Max	Min	Rate	Max	Min	Rate	Max	Min	Rate	Max	
		Btu/hr.	4,100	18,100	19,100	4,100	24,200	27,200	10,200	30,000	34,100	13,600	36,100	38,200	13,600	36,100	38,200	13,600	48,000	54,200
Efficiency	SEER.	17.50			17.80			17.20			16.04			16.04			14.00			
		Kw.			0.25	1.58	1.80	0.25	2.15	2.70	0.60	2.79	3.30	-	3.36	-	-	3.36	-	-
Power Supply		220V / 1Ph / 50Hz			220V / 1Ph / 50Hz			220V / 1Ph / 50Hz			220V / 1Ph / 50Hz			380V / 3Ph / 50Hz			380V / 3Ph / 50Hz			
Operation Current		Amp.	1.50	7.55	8.50	1.45	10.10	12.50	3.75	13.10	15.30	-	-	-	-	-	-	-	-	-
Indoor Unit	Standard air flow rate	CMH	900 / 720 / 540			1,750 / 1,520 / 1,180			1,750 / 1,520 / 1,180			1,860 / 1,530 / 1,200			1,860 / 1,530 / 1,200			2,040 / 1,650 / 1,260		
	(H/M/L)	CFM	530 / 420 / 320			1,030 / 894 / 695			1,030 / 895 / 695			1,095 / 900 / 705			1,095 / 900 / 705			1,200 / 970 / 740		
Noise Level	Indoor Unit	dB(A)	52			52			53			-			-			-		
	Indoor Unit (H/M/L)	dB(A)	37 / 35 / 31			42 / 35 / 31			44 / 36 / 32			44 / 38 / 33			44 / 38 / 33			47 / 44 / 37		
Dimension (HxWxD)	Outdoor Unit	mm.	550 x 780 x 290			550 x 780 x 290			630 x 800 x 300			890 x 900 x 320			890 x 900 x 320			890 x 900 x 320		
	Indoor Unit	mm.	235 x 952 x 690			235 x 1,269 x 690			235 x 1,269 x 690			235 x 1,269 x 690			235 x 1,269 x 690			235 x 1,586 x 690		
Net Weight	Outdoor Unit	kg.	27			28			34			-			-			-		
	Indoor Unit	kg.	23			29			29			29			29			37		
Refrigerant Type		R-32			R-32			R-32			R-32			R-32			R-32			
Refrigerant Charge		kg.	0.70			0.90			1.20			-			-			-		
Compressor Type		Single Rotary DC-Inverter			Twin Rotary DC-Inverter			Twin Rotary DC-Inverter			Twin Rotary DC-Inverter			Twin Rotary DC-Inverter			Twin Rotary DC-Inverter			
Expansion Device Valve		Capillary tube			Capillary tube			PMV (Pulse Motor Valve)			PMV (Pulse Motor Valve)			PMV (Pulse Motor Valve)			PMV (Pulse Motor Valve)			
Connecting Pipe	Liquid	Inch	1/4			3/8			3/8			3/8			3/8			3/8		
	Suction	Inch	1/2			5/8			5/8			5/8			5/8			5/8		
	Coupler Style	Type	Flare			Flare			Flare			Flare			Flare			Flare		
	Drain O.D.	mm.	26			26			26			26			26			26		
Pipe Length	Standard	M.	7.5			7.5			7.5			7.5			7.5			7.5		
	Chargeless Pipe	M.	15 (over 15 m, need to extracharge 20 g/m)			15 (over 15 m, need to extra charge 35 g/m)			15 (over 15 m, need to extra charge 35 g/m)			15 (over 15 m, need to extracharge 20 g/m)			15 (over 15 m, need to extracharge 20 g/m)			15 (over 15 m, need to extracharge 20 g/m)		
	Minimum Pipe Length	M.	5			5			5			5			5			5		
	Maximum Pipe Length	M.	25			25			30			30			30			30		
Maximum Pipe Height	M.	10			10			20			20			20			20			
Capacity Test Condition		Indoor : 27 °Cdb, 19 °Cwb; Outdoor : 35 °Cdb, 24 °Cwb																		

4-Way Cassette Type



Compact 4 Way Cassette
Model : 40TGEV0181UP

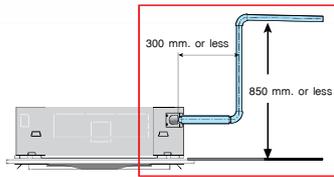
Multi-louver individual control

The 4-way independent air distribution system helps deliver cool air to meet the needs of users in all directions.



Built-in condensate drain pump

The drain pump is a standard equipment installed from the factory. Able to deliver effluent vertically up to 850 mm.



Wireless Remote



Wireless remote controller
(Standard)



Wired remote controller**
40VCW56-8-JEE
(Option)



Wired remote controller*
CARR-AMT32E
(Option)



Wired remote controller**
CARR-AMT0AE



Wired remote controller**
CARR-AMSOAE
(Option)

* Included with indoor unit
** Wired remote controller is available as option.

Anti-bacterial glass

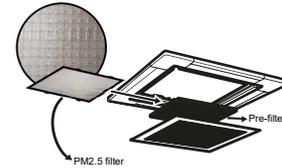
Anti-bacterial glass set helps limit growth of bacteria in the sewage system and assist in draining make it easier



*(For model 40TGEV0241-0551UP)

Air purifier solution PM2.5 (Option)

Air purifier kit removes small particles by high-quality filter and Plasma solution. This new solution traps mold, pollen and PM2.5 particle by electrostatic force. Moreover, the users are notified of the air quality level by the LED indicator color.



Ceiling Panel



40VPU018C8SWTST
(For 40TGEV0181UP Only)



40TG-00L--10FR
White color ceiling panel (Standard)



40TG-00L--10FRB
Black color ceiling panel (Option)

Specification

Specification			4-Way Cassette - Inverter control																							
Model Name	Outdoor Unit		38TGEV0181A1			38TGEV0241A1			38TGEV0301A1			38TGEV0361A1			38TGEV0361A3			38TGEV0481A3								
	Indoor Unit		40TGEV0181UP			40TGEV0241UP			40TGEV0301UP			40TGEV0361UP			40TGEV0361UP			40TGEV0481UP								
Cooling Capacity (Min. Hz./Rate Hz./ Max Hz.)		Kw.	Min	Rate	Max	Min	Rate	Max	Min	Rate	Max	Min	Rate	Max	Min	Rate	Max	Min	Rate	Max	Min	Rate	Max	Min	Rate	Max
			Btu/hr.	4,100	18,100	19,100	4,100	24,200	27,200	10,200	30,000	34,100	13,600	36,100	38,200	13,600	36,100	38,200	13,600	48,000	54,200					
Efficiency	SEER	Btu/hr./Watt	17.50			17.80			17.20			16.04			16.04			14.00								
Star rating			3			3			3			3			3			3								
Power Consumption		Kw.	0.25	1.58	1.80	0.25	2.15	2.70	0.60	2.83	3.30	-	3.36	-	-	3.36	-	-	5.64	-						
Power Supply			220V / 1Ph / 50Hz			220V / 1Ph / 50Hz			220V / 1Ph / 50Hz			220V / 1Ph / 50Hz			380V / 3Ph / 50Hz			380V / 3Ph / 50Hz								
Operation Current		Amp.	1.45	7.55	8.50	1.45	10.20	12.50	3.75	13.20	15.30	-	-	-	-	-	-	-	-	-						
Indoor Unit	Standard air flow rate (H/M/L)	CMH	800 / 680 / 550			1,230 / 960 / 810			1,820 / 1,360 / 1,080			2,010 / 1,440 / 1,170			2,010 / 1,440 / 1,170 (TBD)			2,130 / 1,500 / 1,260								
		CFM	470 / 400 / 320			720 / 570 / 480			1,070 / 800 / 640			1,180 / 850 / 690			1,180 / 850 / 690 (TBD)			1,250 / 880 / 740								
Noise Level	Outdoor Unit	dB(A)	52			52			53			-			-			-								
		Indoor Unit (H/M/L)	dB(A)	44 / 39 / 35			35 / 31 / 28			43 / 39 / 37			46 / 42 / 37			46 / 42 / 37			47 / 44 / 39							
Dimension (HxWxD)	Outdoor Unit	mm.	550 x 780 x 290			550 x 780 x 290			630 x 800 x 300			890 x 900 x 320			890 x 900 x 320			890 x 900 x 320								
		Indoor Unit	Housing :	256x575x575,			256x840x840,			256x840x840,			256x840x840,			256x840x840,			256x840x840,							
		Ceiling Panel :	12x620x620			30x950x950			30x950x950			30x950x950			30x950x950			30x950x950								
Net Weight	Outdoor Unit	kg.	27			28			34			-			-			-								
		Indoor Unit	kg.	Housing : 16, Ceiling Panel : 2.5			Housing : 20, Ceiling Panel : 4			Housing : 20, Ceiling Panel : 4			Housing : 24, Ceiling Panel : 4			Housing : 24, Ceiling Panel : 4			Housing : 24, Ceiling Panel : 4							
Refrigerant Type			R-32			R-32			R-32			R-32			R-32			R-32								
Refrigerant Charge		kg.	0.70			0.90			1.20			-			-			-								
Compressor Type			Single Rotary DC-Inverter			Twin Rotary DC-Inverter			Twin Rotary DC-Inverter			Twin Rotary DC-Inverter			Twin Rotary DC-Inverter			Twin Rotary DC-Inverter								
Expansion Device Valve			Capillary tube			Capillary tube			PMV (Pulse Motor Valve)			PMV (Pulse Motor Valve)			PMV (Pulse Motor Valve)			PMV (Pulse Motor Valve)								
Connecting Pipe	Liquid	Inch	1/4			3/8			3/8			3/8			3/8			3/8								
		Suction	Inch	1/2			5/8			5/8			5/8			5/8			5/8							
	Coupler Style	Type	Flare			Flare			Flare			Flare			Flare			Flare								
		Drain O.D.	mm.	32			32			32			32			32			32							
	Pipe Length	Standard	M.	7.5			7.5			7.5			7.5			7.5			7.5							
Chargeless Pipe			M.	15 (over 15 m, need to extra charge 20 g/m)			15 (over 15 m, need to extra charge 35 g/m)			15 (over 15 m, need to extra charge 35 g/m)			15 (over 15 m, need to extracharge 20 g/m)			15 (over 15 m, need to extracharge 20 g/m)			15 (over 15 m, need to extracharge 20 g/m)							
Minimum Pipe Length		M.	5			5			5			5			5			5								
Maximum Pipe Length		M.	25			25			30			30			30			30								
Maximum Pipe Height		M.	10			10			20			20			20			20								
Capacity Test Condition			Indoor : 27 Cdb, 19 Cwb, Outdoor : 35 Cdb, 24 Cwb																							

Feature function



Type of Air conditioner	Under Ceiling	4 Way Cassette
Fan Coil Unit	220Volt/1Ph/50Hz. 42TGEV0181-0481CP	42TGEV0181-0481UP
Condensing Unit	220Volt/1Ph/50Hz. 38TGEV0181-0361A1	38TGEV0181-0361A1
	380Volt/3Ph/50Hz. 38TGEV0361-0481A3	38TGEV0361-0481A3
	kBTU 18/24/30/36/48	18/24/30/36/48
Refrigerant & Operation		
Refrigerant type	R32	R32
Inverter system	Yes	Yes
Function of Convenience		
Auto Swing	Yes	Yes
Swing Pattern Selection	-	Yes
Switchable Fan Speed	Yes	Yes
Dry mode	Yes	Yes
High Ceiling Application	Yes	Yes
2 Selectable Temperature-sensor *1	Yes	Yes
Night Quiet Operation *2	Yes (Optional)	Yes (Optional)
Operation & Maintenance		
Drain pump Motor	Yes (Optional)	Yes
Refrigerant charged from Factory	Yes	Yes
Filter sign	Yes	Yes
Low side Pressure Detection	Yes	Yes
Inside/Outside temperature	Yes	Yes
Compressor suction temperature	Yes	Yes
Compressor discharge temperature	Yes	Yes
Operation current	Yes	Yes
Self-diagnosis Function	Yes	Yes
Control-Property		
Auto-restart function	Yes	Yes
Control by Wireless remote controllers (Closly unit, separate A/B)	Yes	Yes
Control by 2 remote controllers *1	Yes	Yes
Group Control by 1 remote controller *1	Yes	Yes
External Command Control	Yes	Yes
Central Remote Control	Yes	Yes
BMS Control	Yes	Yes
Key Card Control	Yes	Yes
Remote control & Controller		
Set point Auto Reset	Yes	Yes
Set point Range set	Yes	Yes
Weekly Schedule Timer *2	Yes	Yes
Off Timer- Programmed	Yes	Yes
On-Off Timer	Yes	Yes
Weekly Schedule Timer *2	Yes	Yes
Accessories		
Discharge thermo sensor	Yes	Yes
Suction thermo sensor	Yes	Yes
Compressor case thermo	Yes	Yes
Over current protection(Compressor)	Yes	Yes
High pressure switch *3	Yes	Yes
Mis-wiring and un-balance phase protection. *4	Yes	Yes
Surge protector circuit.	Yes	Yes
LED check Error code	Yes	Yes
PCB coat	Yes	Yes
Accessories (Technology for healthy)		
PM 2.5 Filter	-	Yes (Optional)
IAQ with Anti-bacterial Filter	Yes (Optional)	-
Anti-bacterial drain pan kit	Yes (Optional)	Yes
Fresh Air intake Kit	Yes	Yes
Other		
Anti-corrosion coating on the evaporator coil	Acrylic Rasin	Acrylic Rasin
Anti-corrosion coating on the hot coil	Microguard/Bronz-Grow (Optional)	Microguard/Bronz-Grow (Optional)

Remarks : 1. Can be used with Wired Remote control model CARR-AMT32E & 40VCW56-8-JEE
2. Can be used with Wired Remote control model 40VCW56-8-JEE
3. For Condensing Unit model 38TGEV0301A1, 38TGEV0361A1/A3, 38TGEV0481A3
4. For Condensing Unit model 38TGEV0361A3, 38TGEV0481A3

L/C REMOTE CONTROLLER

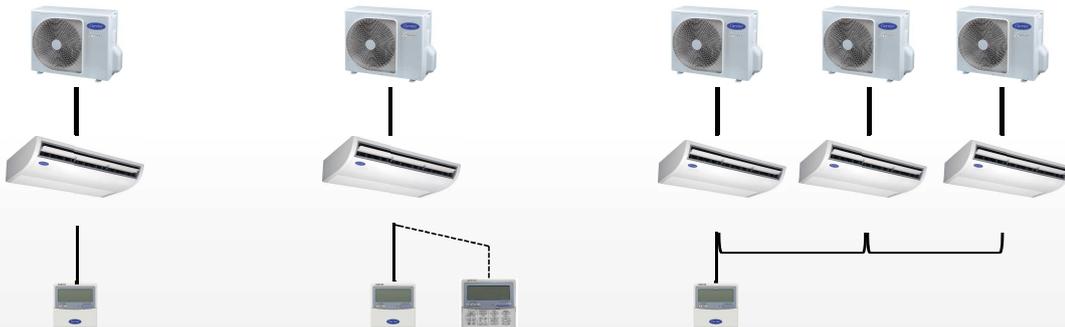
Function	Wired Remote Controller			
				
Model Name	Lite vision plus	Standards plus	Standards	STD-(Weekly Timer)
	40VCW56-8-JEE	CARR-AMT32E	CARR-AMT0AE	CARR-AMS0AE
Start / Stop	✓	✓	✓	✓
Mode	✓	✓	✓	✓
Setting Temperature	✓	✓	✓	✓
Fan Speed	✓	✓	✓	✓
Timer Function	✓	✓	-	✓
Schedule Function	✓	-	-	✓
Energy Save Function	✓	-	-	✓
Filter dirty indicator	✓	✓	-	-
Error Display	✓	✓	✓	✓

Wired remote controller

Single controllers

2 Remote controllers

Group n = 16



Only Wired remote control model 40VCW56-8-JEE / CARR-AMS0AE

Individual remote controller

Wireless remote controller		
Model	4-Way cassette	Ceiling
	Controller packed with FCU	CARR-ACXU31P-E
TGEV	 Standard WC-TE07NE	

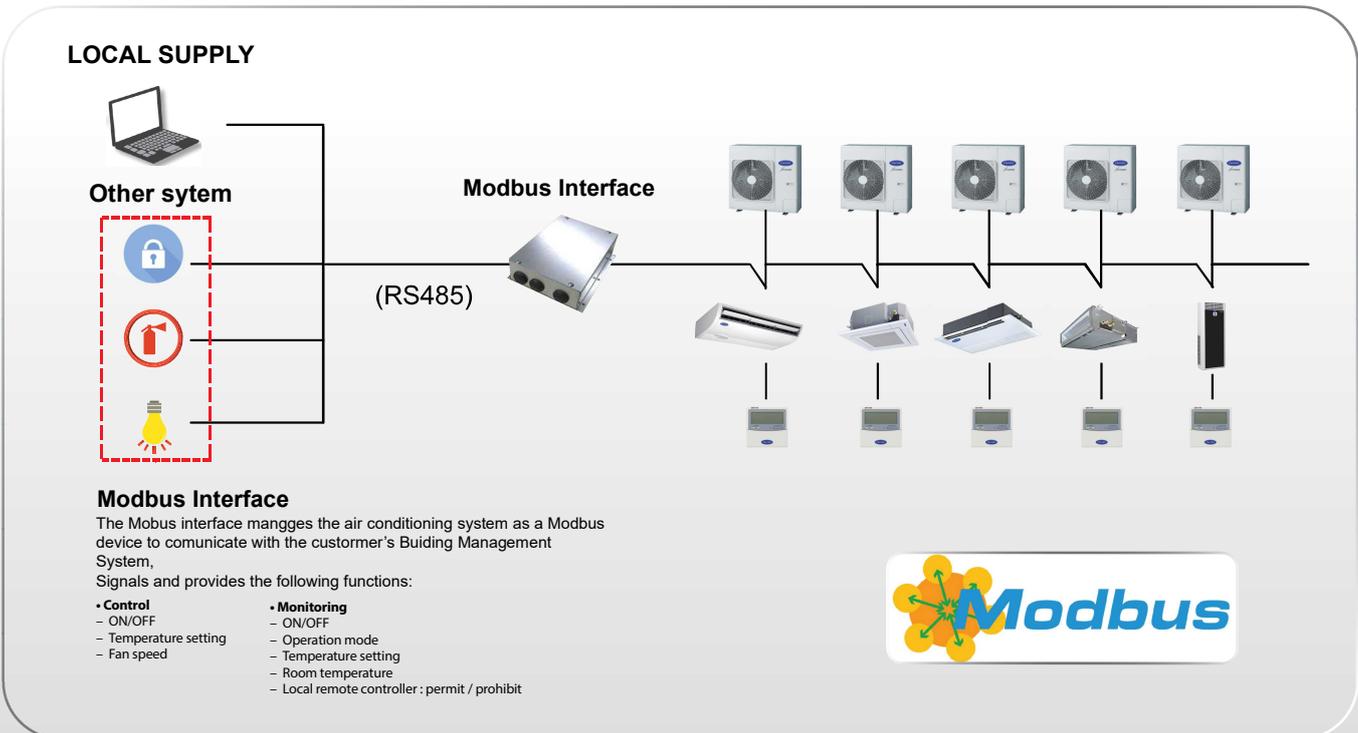
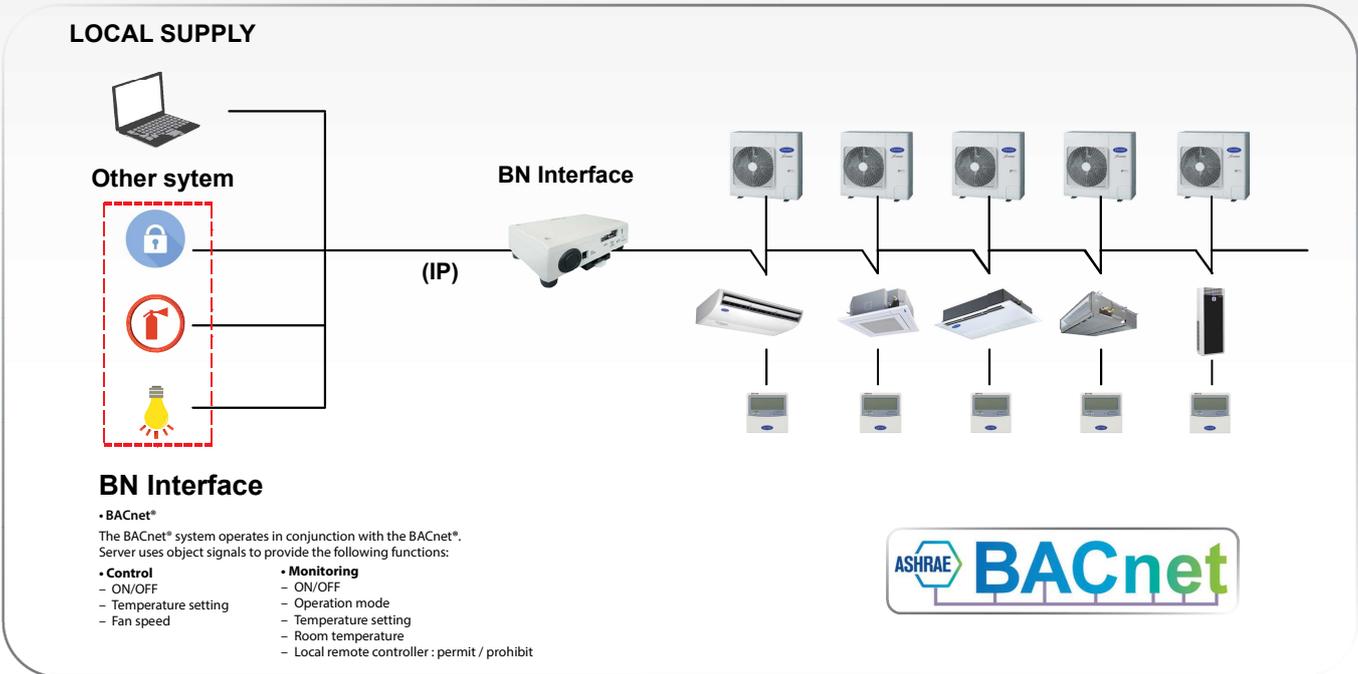


Proprietary and Confidential

Building Management System (BMS) Option

Carrier control systems integrate state-of-the-art web technology to deliver productivity, connectivity, and efficiency, as well as providing all the interfaces you need to access and control a single building, a multi-building campus or even a global network.

Solution of split type air conditioner 1 : 1 model



บริษัท แคนเรียร์ (ประเทศไทย) จำกัด
1858/63-74 ชั้น 14, 15
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Carrier reserves the right to make changes in specifications without prior notice.



YOUR CARRIER MAN :