Carrier

XPOWER
FULL DC INVERTER

CARRIER VC PRO SERIES VRF

VC PRO

OUTDOOR UNIT LINEUP

8/10/12/14/16/18 HP

With single fan

20/22/24 HP

With dual fan

26/28/30/32 HP

With dual fan

OUTDOOR UNIT LINEUP

HP	8	10	12	14	16	18	20	22	24	26	28	30	32
appearance	 (with single fan)						 (with dual fans)			 (with dual fans)			
8	●												
10		●											
12			●										
14				●									
16					●								
18						●							
20							●						
22								●					
24									●				
26										●			
28											●		
30												●	
32													●
34					●	●							
36						● ●							
38					●			●					
40						●		●					
42						●			●				
44						●				●			
46						●					●		
48						●						●	
50													●
52									●		●		

HP	8	10	12	14	16	18	20	22	24	26	28	30	32
appearance	 (with single fan)						 (with dual fans)			 (with dual fans)			
54									●			●	
56									●				●
58											●	●	
60												●●	
62												●	●
64													●●
66						●●						●	
68						●●							●
70						●			●		●		
72						●			●				●
74						●		●					●
76						●				●			●
78						●					●		●
80						●						●	●
82						●							●●
84									●		●		●
86									●			●	●
88									●				●●
90											●	●	●
92												●●	●
94												●	●●
96													●●●

INDOOR UNIT LINEUP

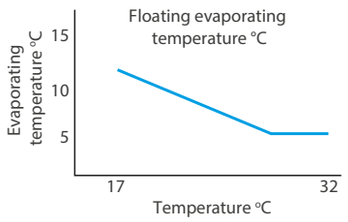
kW		1.8	2.2	2.8	3.6	4.5	5.6	7.1
Btu/h		5k	7k	9k	12k	15k	19k	24k
One-way Cassette		●	●	●	●	●	●	●
Two-way Cassette			●	●	●	●	●	●
Compact Four-way Cassette			●	●	●	●		
Four-way Cassette				●	●	●	●	●
Medium Static Pressure Duct			●	●	●	●	●	●
High Static Pressure Duct								●
Fresh Air Processing Unit								
Wall Mounted Unit			●	●	●	●	●	●
Ceiling / Floor Unit					●	●	●	●
Floor Standing Unit			●	●	●	●	●	●
Console			●	●	●	●		
AHU Control Box			●	●	●	●	●	●

8.0	9.0	10.0	11.2	12.5	14.0	16.0	20.0	25.0	28.0	40.0*	45.0*	56.0*
27k	30k	34k	38k	42k	48k	55k	68k	85k	96k	136k	154k	191k
●	●	●	●		●							
●	●		●		●							
●	●		●		●	●	●	●	●	●	●	●
				●	●		●	●	●			
●	●											
●	●		●		●							
●												
●	●	●	●	●	●	●	●	●	●	●	●	●

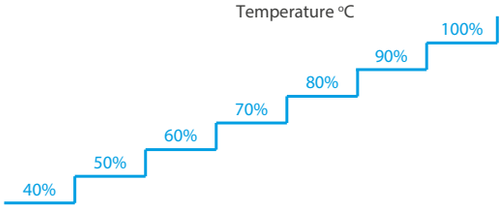
ENERGY SAVING

Energy Management System (EMS)

- Floating refrigerant temperature to balance comfort and efficiency
  The evaporating temperature is automatically adjusted according to both indoor and outdoor temperature to maximize the comfort and energy efficiency.

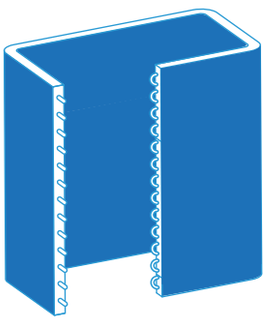


- Output limitation during electricity supply restrictions
  With the integration of EMS, for projects with temporary electricity supply restrictions, VC Pro VRF can be set to output 40-100% capacity.



4-side heat exchanger

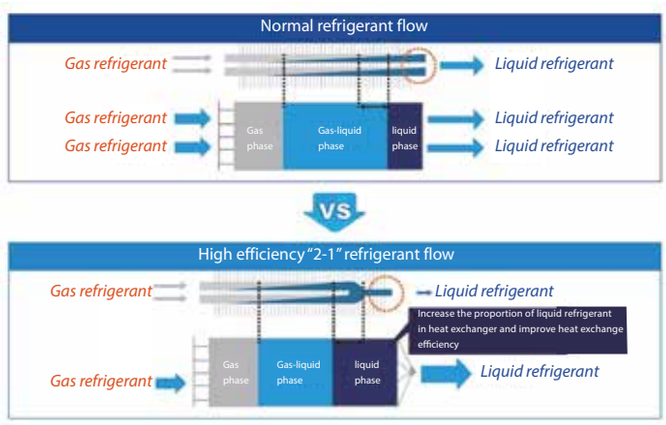
G-type heat exchangers have higher energy efficiency than the U-type.



2-rows G-type heat exchanger

High efficiency"2-1"refrigerant flow

The high efficiency "2-1" refrigerant flow increases the proportion of liquid refrigerant in heat exchanger and improve heat exchange efficiency.



WIDE OPERATION RANGE

Wide Capacity Range

For single unit,the footprint is small and maximum capacity is up to 32HP. For combined units,maximum three 30HP units can be combined with capacity up to 96HP.

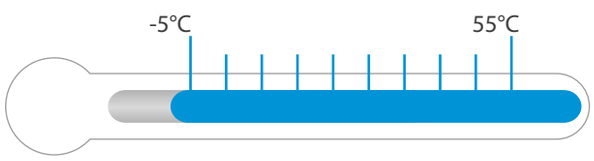
8/10/12/14/16/18HP
(with single fan)

20/22/24HP
(with dual fans)

26/28/30/32HP
(with dual fans)

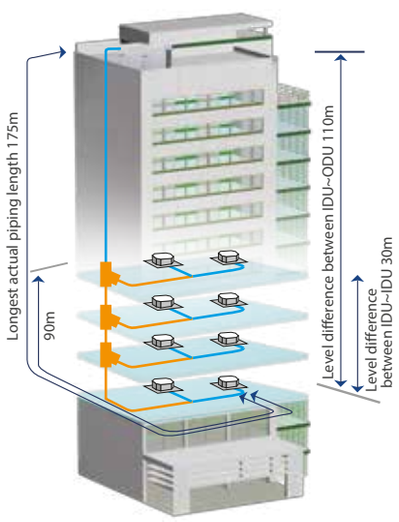
Wide Operation Range

The VC Pro VRF can operate stably in a wide ambient temperature range: from -5°C to 55°C in cooling mode.



Long Piping Capability

- Total piping length: 1000m
- Longest piping length-actual (equivalent): 175m(200m)
- Longest piping length after first branch: 40/90*m
- Level difference between IDUs and ODU-ODU above (below): 90m (110m)
- Level difference between IDUs: 30m

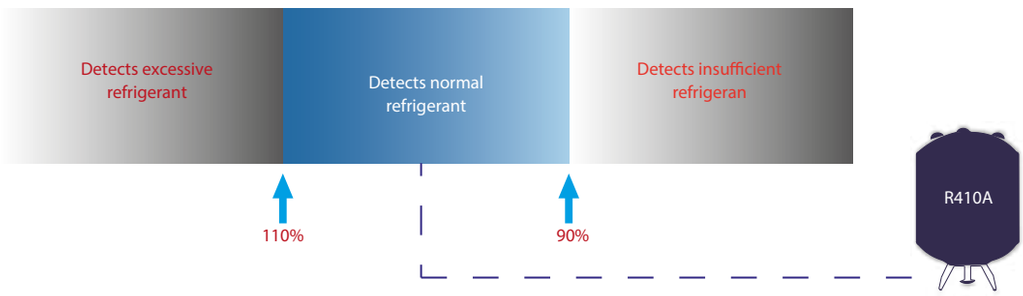


*The longest length after 1st branch is 40m as standard but can be extended up to 90m under certain conditons. Please contact your local Carrier authorized person for further information.

HIGH RELIABILITY

Real-time Refrigerant Amount Monitoring

The temperature and pressure of refrigerant can be real-time monitored by the outdoor unit. When the level of refrigerant is too low or too high, it can cause damage to the unit and poor performance. VC Pro outdoor unit can detect excessive or insufficient amounts of refrigerant to ensure consistent performance.



Duty Cycling

Duty cycling equalizes the running time of the outdoor units in multi-unit system and of the compressors in each unit, significantly extending compressor lifespan.

1st cycle | 2nd cycle | 3rd cycle

Backup Operation

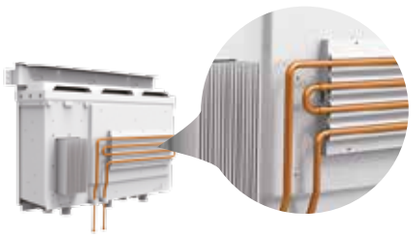
In units with two compressors, if one compressor fails, the other compressor can run on its own for up to 4 days, allowing time for maintenance or repair whilst maintaining comfort.

Compressor backup

HIGH RELIABILITY

Refrigerant cooling PCB

The VC PRO VRF uses refrigerant cooling technology to cool the electric control box. It decreases the average temperature of electrical control components by about 8 degrees, guaranteeing the stable and safe running of the control system.



Intelligent Configurations

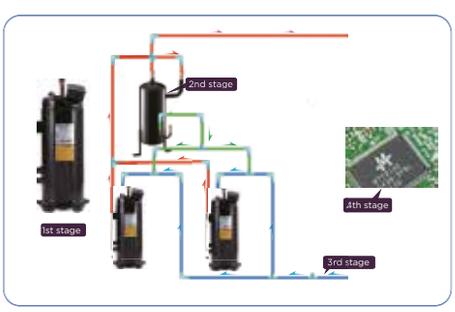
Intelligent configurations greatly simplify installation, commissioning and servicing.

- Field local configuration achieves quick and easy on-site settings, simplifies installation and commissioning.
- System checking and settings also can be easily achieved via wired making the configuration more flexible and convenient.
- A desktop or laptop PC can be used for browser-based access to achieve system configurations through IMMPRO gateway via LAN connection.

Precise Oil Control Technology

Four stages of oil control technology ensure all outdoor compressor oil is always kept at a safe level, eliminating any compressor oil shortage problems.

- Compressor internal oil separation.
- High-efficiency centrifugal oil separator (with separation efficiency of up to 99%) ensures that oil is separated from the discharge gas and returned to the compressors in a timely fashion.
- Oil balance pipes between compressors ensure even oil distribution to keep compressors running normally.
- Auto oil return program monitors the running time and system status to ensure reliable oil return.



EASY INSTALLATION AND SERVICE

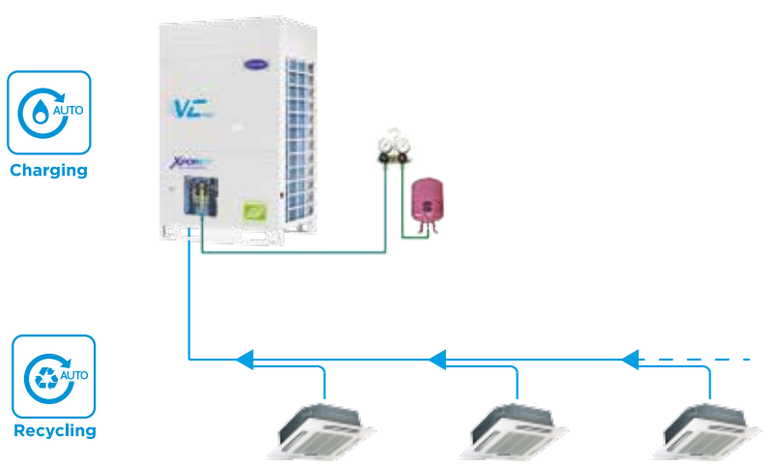
Oil Balance pipe not required

With the new oil management system, there is no need of oil balance pipe.

Automatic Refrigerant Charging/Recycling Function*

Automatic refrigerant charging and recycling makes installation and service easier and more efficient.

*This function is available as a customization option.



Dust-clean function*

The innovatively designed dust-clean function enables the outdoor unit to prevent the dust by itself.

*This function is available as a customization option.

ENHANCED COMFORT

Silent technology features

Several noise reducing components reduce the running noise of outdoor units.

*Customize option

Specifications

HP			8	10	12	14
Model name			38VF008H11901C	38VF010H11901C	38VF012H11901C	38VF014H11901C
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz			
Cooling[1]	Capacity	kW	22.4	28.0	33.5	40.0
		kBtu/h	76.5	95.6	114.4	136.6
Compressor	Type		DC inverter			
	Quantity		1			
Fan	Type		DC			
	Quantity		1			
	Airflow rate	m^3/h	10400			10800
Refrigerant	Type		R410A			
	Factory charge	kg	8			
Pipe connections[2]	Liquid pipe	mm	Φ12.7		Φ15.9	
	Gas pipe	mm	Φ25.4		Φ28.6	Φ31.8
Sound pressure level[3]		dB(A)	57	58	60	
Net dimensions (W×H×D)		mm	960×1615×765			
Packed dimensions (W×H×D)		mm	1025×1790×830			
Net weight		kg	188			
Gross weight		kg	204			
Ambient temp.	Cooling	°C	-5°C to 55°C			

HP			16	18	20	22
Model name			38VF016H11901C	38VF018H11901C	38VF020H11901C	38VF022H11901C
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz			
Cooling[1]	Capacity	kW	45.0	50.0	56.0	61.5
		kBtu/h	153.7	170.8	191.3	210.0
Compressor	Type		DC inverter			
	Quantity		1		2	
Fan	Type		DC			
	Quantity		1		2	
	Airflow rate	m^3/h	11600		12000	12200
Refrigerant	Type		R410A			
	Factory charge	kg	11		13	
Pipe connections[2]	Liquid pipe	mm	Φ15.9		Φ19.1	
	Gas pipe	mm	Φ31.8		Φ31.8	
Sound pressure level[3]		dB(A)	60	61	62	63
Net dimensions (W×H×D)		mm	960×1615×765		1250×1615×765	
Packed dimensions (W×H×D)		mm	1025×1790×830		1305×1790×820	
Net weight		kg	197		278	
Gross weight		kg	213		297	
Ambient temp.	Cooling	°C	-5°C to 55°C			

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

HP			24	26	28
Model name			38VF024H11901C	38VF026H11901C	38VF028H11901C
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz		
Cooling[1]	Capacity	kW	67.0	73.0	78.5
		kBtu/h	228.8	249.3	268.1
Compressor	Type		DC inverter		
	Quantity		2		
Fan	Type		DC		
	Quantity		2		
	Airflow rate	m^3/h	12200	19600	
Refrigerant	Type		R410A		
	Factory charge	kg	13	19	
Pipe connections[2]	Liquid pipe	mm	Φ19.1	Φ22.2	
	Gas pipe	mm	Φ31.8	Φ31.8	
Sound pressure level[3]		dB(A)	63	64	
Net dimensions (W×H×D)		mm	1250×1615×765	1585×1615×765	
Packed dimensions (W×H×D)		mm	1305×1790×820	1650×1810×840	
Net weight		kg	278	319	
Gross weight		kg	297	343	
Ambient temp.	Cooling	℃	-5℃ to 55℃		

HP			30	32
Model name			38VF030H11901C	38VF032H11901C
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz	
Cooling[1]	Capacity	kW	85.0	90.0
		kBtu/h	290.3	307.4
Compressor	Type		DC inverter	
	Quantity		2	
Fan	Type		DC	
	Quantity		2	
	Airflow rate	m^3/h	20600	
Refrigerant	Type		R410A	
	Factory charge	kg	19	
Pipe connections[2]	Liquid pipe	mm	Φ22.2	
	Gas pipe	mm	Φ38.1	
Sound pressure level[3]		dB(A)	64	
Net dimensions (W×H×D)		mm	1585×1615×765	
Packed dimensions (W×H×D)		mm	1650×1810×840	
Net weight		kg	338	
Gross weight		kg	362	
Ambient temp.	Cooling	℃	-5℃ to 55℃	

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Specifications

HP			34	36	38	40
Model name			38VF034H11901C	38VF036H11901C	38VF038H11901C	38VF040H11901C
Combination type			18HP+16HP	18HP+18HP	22HP+16HP	22HP+18HP
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz			
Cooling[1]	Capacity	kW	95.0	100.0	107.0	111.5
		kBtu/h	324.5	341.6	365.4	380.8
Compressor	Type		DC inverter			
	Quantity		2		3	
Fan	Type		DC			
	Quantity		2		3	
Refrigerant	Type		R410A			
	Factory charge	kg	11×2		13+8	13+11
Pipe connections[2]	Liquid pipe	mm	19.1			
	Gas pipe	mm	31.8	38.1		
Sound pressure level[3]		dB(A)	65			
Net dimensions (W×H×D)		mm	(960×1615×765)×2		(1250×1615×765)+(960×1615×765)	
Packed dimensions (W×H×D)		mm	(1025×1790×830)×2		(1305×1790×820)+(1025×1790×830)	
Net weight		kg	197×2		278+188	278+197
Gross weight		kg	213×2		297+204	297+213
Ambient temp.	Cooling	℃	-5℃ to 55℃			

HP			42	44	46	48
Model name			38VF042H11901C	38VF044H11901C	38VF046H11901C	38VF048H11901C
Combination type			24HP+18HP	26HP+18HP	28HP+18HP	30HP+18HP
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz			
Cooling[1]	Capacity	kW	117.0	123.0	128.5	135.0
		kBtu/h	399.6	420.1	438.9	461.1
Compressor	Type		DC inverter			
	Quantity		3			
Fan	Type		DC			
	Quantity		3			
Refrigerant	Type		R410A			
	Factory charge	kg	13+11	19+11		
Pipe connections[2]	Liquid pipe	mm	19.1			
	Gas pipe	mm	38.1			
Sound pressure level[3]		dB(A)	66			
Net dimensions (W×H×D)		mm	(1250×1615×765)+(960×1615×765)	(1585×1615×765)+(960×1615×765)		
Packed dimensions (W×H×D)		mm	(1305×1790×820)+(1025×1790×830)	(1650×1810×840)+(1025×1790×830)		
Net weight		kg	278+197	338+197		
Gross weight		kg	297+213	362+213		
Ambient temp.	Cooling	℃	-5℃ to 55℃			

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

HP			50	52	54	56
Model name			38VF050H11901C	38VF052H11901C	38VF054H11901C	38VF056H11901C
Combination type			32HP+18HP	28HP+24HP	30HP+24HP	32HP+24HP
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz			
Cooling[1]	Capacity	kW	140.0	145.5	152.0	157.0
		kBtu/h	478.2	496.9	519.1	536.2
Compressor	Type		DC inverter			
	Quantity		3	4		
Fan	Type		DC			
	Quantity		3	4		
Refrigerant	Type		R410A			
	Factory charge	kg	19+11	19+13		
Pipe connections[2]	Liquid pipe	mm	19.1			
	Gas pipe	mm	38.1			41.2
Sound pressure level[3]		dB(A)	66			
Net dimensions (W×H×D)		mm	(1585×1615×765)+(960×1615×765)	(1585×1615×765)+(1250×1615×765)		
Packed dimensions (W×H×D)		mm	(1650×1810×840)+(1025×1790×830)	(1650×1810×840)+(1305×1790×820)		
Net weight		kg	338+197	338+278		
Gross weight		kg	362+213	362+297		
Ambient temp.	Cooling	℃	-5℃ to 55℃			

HP			58	60	62	64
Model name			38VF058H11901C	38VF060H11901C	38VF062H11901C	38VF064H11901C
Combination type			30HP+28HP	30HP+30HP	32HP+30HP	32HP+32HP
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz			
Cooling[1]	Capacity	kW	163.5	170.0	175.0	180.0
		kBtu/h	558.4	580.6	597.7	614.8
Compressor	Type		DC inverter			
	Quantity		4			
Fan	Type		DC			
	Quantity		4			
Refrigerant	Type		R410A			
	Factory charge	kg	19×2			
Pipe connections[2]	Liquid pipe	mm	19.1			
	Gas pipe	mm	41.2			
Sound pressure level[3]		dB(A)	66			
Net dimensions (W×H×D)		mm	(1585×1615×765)×2			
Packed dimensions (W×H×D)		mm	(1650×1810×840)×2			
Net weight		kg	338×2			
Gross weight		kg	362×2			
Ambient temp.	Cooling	℃	-5℃ to 55℃			

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Specifications

HP			66	68	70	72
Model name			38VF066H11901C	38VF068H11901C	38VF070H11901C	38VF072H11901C
Combination type			30HP+18HP+18HP	32HP+18HP+18HP	28HP+24HP+18HP	32HP+22HP+18HP
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz			
Cooling[1]	Capacity	kW	185.0	190.0	196.5	201.5
		kBtu/h	631.9	647.0	671.1	688.2
Compressor	Type		DC inverter			
	Quantity		4		5	
Fan	Type		DC			
	Quantity		4		5	
Refrigerant	Type		R410A			
	Factory charge	kg	19+11×2		19+13+11	
Pipe connections[2]	Liquid pipe	mm	19.1	22.2		
	Gas pipe	mm	41.2	44.5		
Sound pressure level[3]		dB(A)	67	67		
Net dimensions (W×H×D)		mm	(1585×1615×765)+(960×1615×765)×2		(1585×1615×765)+(1250×1615×765)+(960×1615×765)	
Packed dimensions (W×H×D)		mm	(1650×1810×840)+(1025×1790×830)×2		(1650×1810×840)+(1305×1790×820)+(1025×1790×830)	
Net weight		kg	338+197×2		338+278+197	
Gross weight		kg	362+213×2		362+297+213	
Ambient temp.	Cooling	°C	-5°C to 55°C			

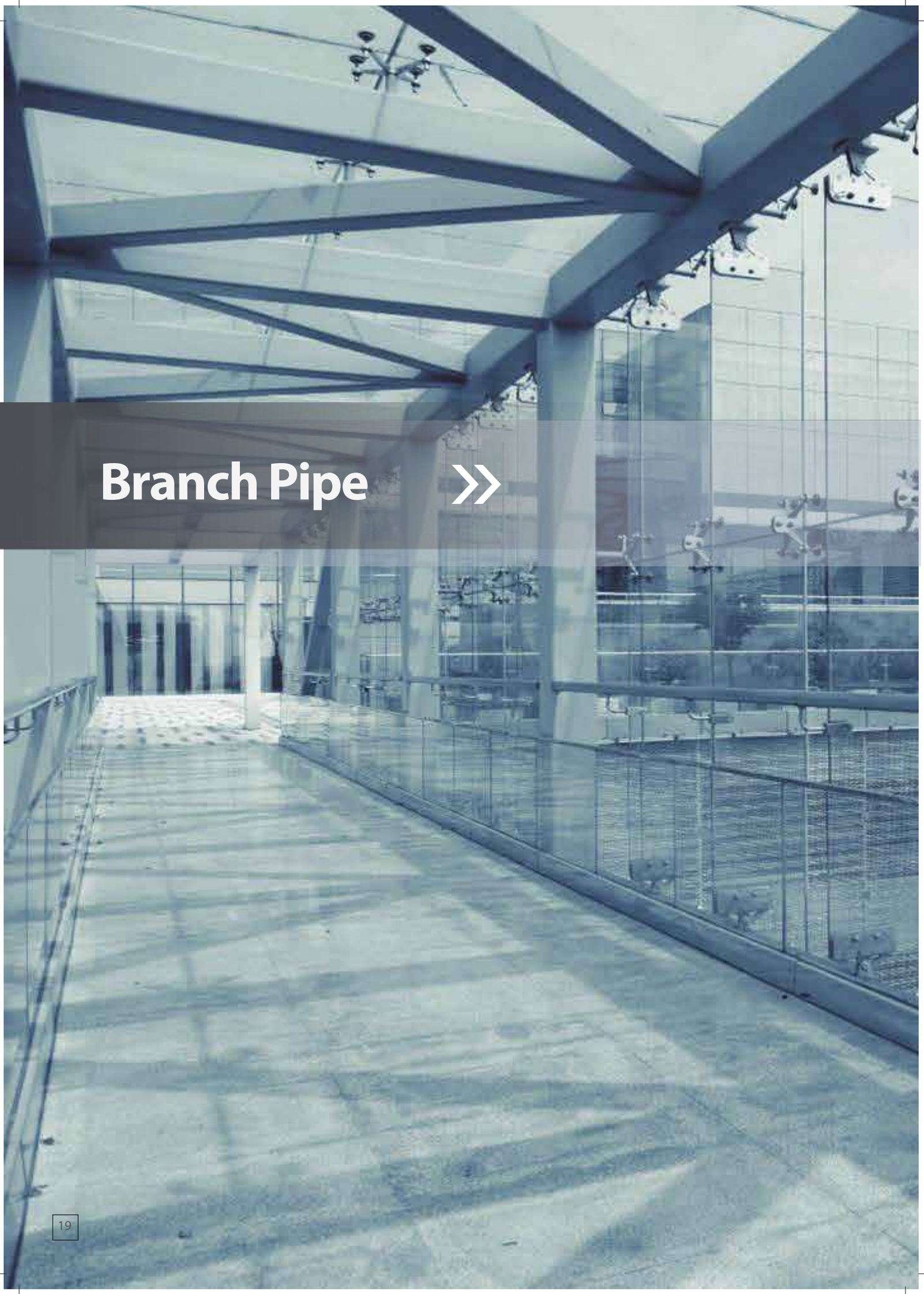
HP			74	76	78	80
Model name			38VF074H11901C	38VF076H11901C	38VF078H11901C	38VF080H11901C
Combination type			32HP+24HP+18HP	32HP+26HP+18HP	32HP+28HP+18HP	32HP+30HP+18HP
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz			
Cooling[1]	Capacity	kW	207.0	213.0	218.5	225.0
		kBtu/h	707.0	727.5	746.3	768.5
Compressor	Type		DC inverter			
	Quantity		5			
Fan	Type		DC			
	Quantity		5			
Refrigerant	Type		R410A			
	Factory charge	kg	19+13+11	19×2+11		
Pipe connections[2]	Liquid pipe	mm	22.2			
	Gas pipe	mm	44.5			
Sound pressure level[3]		dB(A)	68			
Net dimensions (W×H×D)		mm	(1585×1615×765)+(1250×1615×765)+(960×1615×765)	(1585×1615×765)×2+(960×1615×765)		
Packed dimensions (W×H×D)		mm	(1650×1810×840)+(1305×1790×820)+(1025×1790×830)	(1650×1810×840)×2+(1025×1790×830)		
Net weight		kg	338+278+197	338×2+197		
Gross weight		kg	362+297+213	362×2+213		
Ambient temp.	Cooling	°C	-5°C to 55°C			

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.


HP			82	84	86	88
Model name			38VF082H11901C	38VF084H11901C	38VF086H11901C	38VF088H11901C
Combination type			32HP+32HP+18HP	32HP+28HP+24HP	32HP+30HP+24HP	32HP+32HP+24HP
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz			
Cooling[1]	Capacity	kW	230.0	235.5	242.0	247.0
		kBtu/h	785.6	804.3	826.5	843.6
Compressor	Type		DC inverter			
	Quantity		5	6		
Fan	Type		DC			
	Quantity		5	6		
Refrigerant	Type		R410A			
	Factory charge	kg	19×2+11		19×2+13	
Pipe connections[2]	Liquid pipe	mm	22.2	25.4		
	Gas pipe	mm	44.5	50.8		
Sound pressure level[3]		dB(A)	68	68		
Net dimensions (W×H×D)		mm	(1585×1615×765)×2+(960×1615×765)		(1585×1615×765)×2+(1250×1615×765)	
Packed dimensions (W×H×D)		mm	(1650×1810×840)×2+(1025×1790×830)		(1650×1810×840)×2+(1305×1790×820)	
Net weight		kg	338×2+197		338×2+278	
Gross weight		kg	362×2+213		362×2+297	
Ambient temp.	Cooling	℃	-5℃ to 55℃			

HP			90	92	94	96
Model name			38VF090H11901C	38VF092H11901C	38VF094H11901C	38VF096H11901C
Combination type			32HP+30HP+28HP	32HP+30HP+30HP	32HP+32HP+30HP	32HP+32HP+32HP
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz			
Cooling[1]	Capacity	kW	253.5	260.0	265.0	270.0
		kBtu/h	865.8	888.0	905.1	922.2
Compressor	Type		DC inverter			
	Quantity		6			
Fan	Type		DC			
	Quantity		6			
Refrigerant	Type		R410A			
	Factory charge	kg	19×3			
Pipe connections[2]	Liquid pipe	mm	25.4			
	Gas pipe	mm	50.8			
Sound pressure level[3]		dB(A)	68			
Net dimensions (W×H×D)		mm	(1585×1615×765)×3			
Packed dimensions (W×H×D)		mm	(1650×1810×840)×3			
Net weight		kg	338×3			
Gross weight		kg	362×3			
Ambient temp.	Cooling	℃	-5℃ to 55℃			

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.



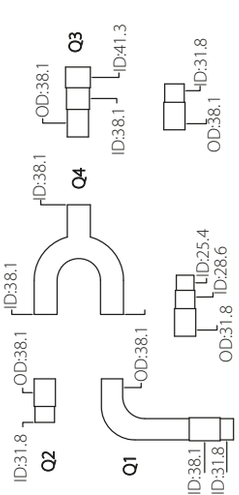
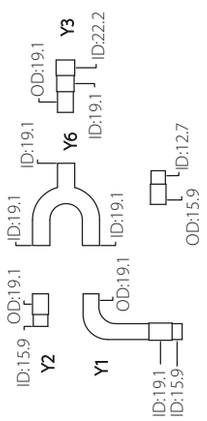
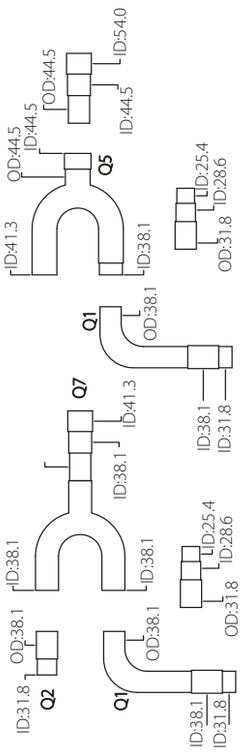
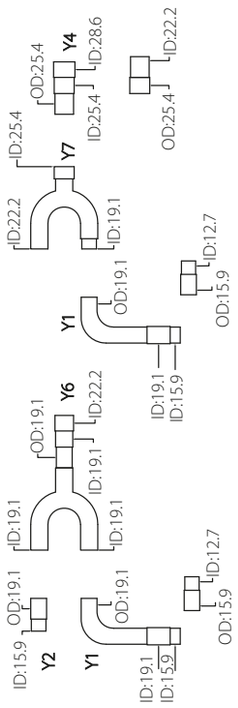
Branch Pipe »

BRANCH JOINTS

Type	Appearance	Model	Packed Dimensions mm	Gross Weight kg	Note
Branch joints for outdoor units		BJC-02E-CM(i)	255×150×185	2.0	Connecting two outdoor units
		BJC-03E-CM(i)	345×160×285	4.3	Connecting three outdoor units

Dimensions

Outdoor Branch Joints

Model	Gas side joints	Liquid side joints
BJC-02E-CM(i)		
BJC-03E-CM(i)		

Note

CARRIER SERVICE HELPLINE
1800 3000 3545
1800 1021 421

TOTALINE

For more details, please contact our sales office:

Corporate & Registered Office: Carrier Airconditioning & Refrigeration Ltd, Kherki Daula Post, Narsingpur, Gurgaon 122004, Tel: 0124-4825500
Sales Offices:– Ahmedabad: 079-44820400 **Ghaziabad:** 0120-4183260 **Bangalore:** 080-43442000 **Bhubaneswar:** 9778030033 **Chandigarh:** 0172-5007549/50 **Chennai:** 044-66448888 **Cochin:** 0484-4029001 **Coimbatore:** 7397444250 **Delhi/NCR:** 0124-4873200 **Hyderabad:** 040-41812233 **Indore:** 9810204975 **Jaipur:** 0141-4921737 **Kolkata:** 033-4059-2000/3000 **Lucknow:** 0522-4158701 **Mumbai:** 022-61700700 **Pune:** 020-48571000/01

CIN: U74999HR1992FLC036104/ **Website:** www.carrierindia.com/ **E-mail:** customersupport@carrier.com

January 2020

Carrier