





Airwell, Just feel well

[ MC	DEL NAME ]		Capacity (HP)	Cooling capacity (kW)	Heating capacity (kW)	Page
=	YCV150	00	5	15	17	8
WINI FLOW LOGIC	YCV180	C'	6	18	20	8
	YCVFD280		10	28	31.5	8
	YCV280		10	28	31.5	10
OGIC II	YCV335		12	33.5	37.5	10
FLOW L	YCV400		14	40	45	10
	YCV450		16	45	50	10

**VRF Range** Outdoor units

INDOOR UNITS Cooling Heating Maximum Range cooling Capacity capacity capacity capacity connectable\* indoor units OUTDOOR UNITS (HP) connectable (kW) (kW) (kW) 5 15.0 17.0 8 7.5 - 19.5 1 X YCV150 18.0 20.0 9 9 - 23 6 1 X YCV180 14 - 36 10 28.0 31.5 1 X YCVFD280 or 1 X YCV280 16 17 - 43 12 33.5 37.5 1 X YCV335 19 14 23 20 - 52 40.0 45.0 1 X YCV400 16 45.0 50.0 26 22.5 - 58.5 1 X YCV450 20 63.0 33 28 - 72 56.0 2 X YCV280 22 31 - 79.5 61.5 69.0 1 X YCV280 + 1 X YCV335 36 34 - 88 24 68.0 76.5 1 X YCV280 + 1 X YCV400 39 26 73.0 81.5 1 X YCV280 + 1 X YCV450 43 37 - 94.5 28 80.0 87.5 2 X YCV400 46 40 - 104 30 85.0 95.0 50 43 - 110.5 1 X YCV400 + 1 X YCV450 32 90.0 100.0 2 X YCV450 53 45 - 117 34 96.0 108.0 2 X YCV280 + 1 X YCV400 56 48 - 124.5 59 51 - 131 36 101.0 113.0 2 X YCV280 + 1 X YCV450 38 54 - 140 108.0 119.0 1 X YCV280 + 2 X YCV400 63 1 X YCV280 + 1 X YCV400 113.0 126.5 64 57 - 146.5 40 + 1 X YCV450 42 118.0 131.5 1 X YCV280 + 2 X YCV450 64 59 - 153 62 - 160.5 44 123.5 137.5 1 X YCV335 + 2 X YCV450 64 46 130.0 145.0 1 X YCV400 + 2 X YCV450 64 65 - 169 3 X YCV450 64 68 - 175.5 **48** 135.0 150.0

### MORE OPTIONAL OUTDOOR CAPACITY

The basic outdoor unit can be combined being modular in standard. The combined outdoors will get the capacity at the interval of 48 HP. Airwell VRF system has the advantage to be able to operate with only one indoor unit (minimum capacity connected must be 50%).

\* Indoor total capacity can be 50% - 130% of outdoor capacity.

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CAPACITY (kBtu/h)

				Capacity (HP)
			-	Cooling (kW)
MODEL NAME			Page	Heating (kW)
HIGH WALL	HAV		22	
CASSETTE 600X600 <b>UPGRADE</b>	CBV		23	
CASSETTE 900X900	CCV		24	
FLOOR CEILING	FAV	NEEDEN ORKONA	25	
DUCTED LOW STATIC PRESSURE	DAV		26	
DUCTED MEDIUM STATIC PRESSURE	DBV	000	27	
DUCTED HIGH STATIC PRESSURE	DCV		28	
CONSOLE	EAV		29	
AHU CONNECTION KIT		2	30	

VRF Range Indoor units

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7	9	12	16	18	24	28	30	38	48	72	96	192
0.75	1.25	1.5	1.75	2.25	3	3.5	3.75	4.75	6	9	12	24
2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14	22.6	28	56
2.5	3.2	4	5	6.3	8	9	10	12.5	16	25	31.5	63
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# Mini FlowLogic II and FlowLogic II, high performance systems ultra modularity, multi applications



Mini FlowLogic II and FlowLogic II are ranges of variable refrigerant flow (VRF) solutions for heating and air conditioning applications including two innovative systems, each using high performance R410A refrigerant.

These ranges are unmatched by anything on the market and can independently Controls **up to 64 indoor units**, offering a capacity from 5 to 16 HP (15 to 135 kW). The DC Inverter technology means that these systems achieve remarkable energy efficiency:

### COP up to 4.2:

The energy efficiency of these ranges are exceptional thanks to the use of DC Inverter compressors and the use of variable speed fan motors. Therefore for 1 kW of electricity used by the system, up to 4 kW of heat output is generated.

### Ultra silent operation:

The Twin Rotary and Scroll DC Inverter compressors are fitted across the entire FlowLogic II range producing a significant reduction in noise levels and vibrations that guarantees silent running.

### Compact footprint.

These ranges of products are adapted to numerous applications: residential, small businesses, major office complexes, shopping centers or hotels etc: and this is thanks to its numerous technical assets such as:

- Ranges of 3 phases units.
- Significant refrigerant pipe lengths and height differences.
- Minimum outdoor temperature for heating mode operation: -15°C.
- Heating or cooling.

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# A COMPLETE RANGE OF INDOOR UNITS AND CONTROL DEVICES

All indoor units and control devices are the same across the two systems of the Airwell Mini FlowLogic II and FlowLogic II range.



HIGH WALL HAV





FLOOR CEILING FAV



CASSETTE 600x600 CBV



CASSETTE 900x900 CCV





DUCTED LOW STATIC PRESSURE DAV





DUCTED MEDIUM STATIC PRESSURE DBV





SOFTWARE SELECTION PROGRAM

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This software offring a solution for piping & wiring design, can help the designer to select the right material lists, basic wiring diagram and control wiring diagram etc.

Airwell also offers a computer selection program for defining size, piping, wiring diagram, and list of material (this software is only a tool to assist decision making) and the results of it is directly dependant of the input data from the customer, so these data are provided for information purpose only and should not replace a study carried out by an approval filter.

## PERFORMANT SYSTEM

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# USE HIGH EFFICIENCY DC INVERTER SCROLL COMPRESSOR, HIGH EFFICACY, LOW NOISE

The highly efficient Scroll compressor is equipped with a "Framen Compliance Mechanism" that allows movement in the axial direction of the frame supporting the cradle Scroll. This greatly reduces both leakage and friction loss, ensuring very high efficiciency throughout the speed range.

### HIGH EFFICIENCY DC FAN MOTOR

The speed of wide range DC fan motor can be adjusted from 0 to 1000 tr/min.

Compared to conventional AC motors, a DC fan motor offers greater operating efficiency, especially during low speed rotation. The efficiency could be 90%.

## HEAT EXCHANGER ADOPTS THE SUBCOOLING TECHNOLOGY: HIGH EFFICIENCY

- The system is cooled with little refrigerant.
- Improve subcooling degree of refrigerant.
- Avoid energy loss due to refrigerant flash evaporating when it goes through PMV.
- W-model Ø8 innergrooved tube.
- Hydrophilic aluminium coil fin, it will increase efficiency of heat exchange by 5%.
- → Increase cooling capacity by 6%.
- → Reduce refrigerant circulation amounts.

Increase the efficiency of system





# Airwell, Just feel well

### **FLEXIBLE INSTALLATION**

### Simplicity of the installation procedure

- → Indoor quantity can be up to 64 sets in maximum. And the indoor total capacity can be 50%-130% of outdoor capacity.
- → If there are multiple oudoors, the outdoors will be running in turns, meaning a much longer lifetime.
- → Multiple types of indoor can be chosen for different requirements.



### **PRECISE CONTROL**

PID control adjusts the output of compressor and the open degree of EEV, balances the indoor refrigerant flow, realizes the linear output, creates a comfortable environment. The temperature can be controlled precisely.



### **180 DEGREE VECTOR CONTROL TECHNOLOGY**

Airwell using power resistance to detect the rotor position of compressor, results in the consistency of the compressor working current and current sine waves, improve power efficiency about 17%.



VRF Outdoor units









# MINI FLOWLOGIC II 2-WAY FRONT DISCHARGE

Three phase outdoor unit, 5 HP, 6 HP and 10 HP class, designed for residential use or for light commercial use.

## [ PRODUCT ADVANTAGES ]

- COP can reach 4.2.
- Three phase electrics.
- Compact (0.32 m<sup>2</sup> footprint).
- Minimum outdoor temperature for heating mode operation -15°C.
- Minimum outdoor temperature for cooling mode operation -5°C.
- DC Inverter compressor and ventilator.
- Refrigerant simple pipe length up to 150 m.
- 5 HP: up to 8 units can be connected.
- 6 HP: up to 9 units can be connected.
- 10 HP: up to 16 units can be connected.
- Power ratio 50-130%.





## MINI FLOWLOGIC II TECHNICAL DATA

Outdoor units		AWAU-YCV150-H13	AWAU-YCV180-H13	AWAU-YCVFD280-H13
Code		7SP14H102	7SP14H013	7SP14H011
RATED CAPACITY				
Cooling	kW	15	18	28
Heating	kW	17	20	31.5
ELECTRICAL PARAMETERS				
Power supply	Ph/V/Hz	3P/400/50-N	3P/400/50-N	3P/400/50-N
Cooling Rated power input	kW	4.2/5.8	5.5	8
Heating Rated power input	kW	4.0/5.8	5.25	7.5
EER/COP		3.41/4.06	3.27/3.8	3.5/4.2
Max current	A	9.6	11.3	23.4
PERFORMANCE				
Airflow (HS)	m³/h	6500	6500	10000
Noise level (HS)	dB(A)	59	60	58
INSTALLATION				
External dimensions (WxHxD)	mm	948x1250x340	948x1250x340	1050x1636x400
Shipping dimensions (WxHxD)	mm	1094x1400x410	1094x1400x410	1150x1790x510
Net/Shipping weight	kg	118/128	130/140	168/183
Compressor type		Rotary	Rotary	Scroll
Refrigerant type		R410A	R410A	R410A
Refrigerant charge	kg	4.4	5.0	7.4
Refrigerant liquid pipe	inches	3/8"	3/8"	1/2"
Refrigerant gas pipe	inches	3/4"	3/4"	7/8"
Max pipe length	m	100	100	300
Max drop between indoor & outdoor*	m	30/20*	30/20*	50
Maximum indoor units connectable	quantity	8	9	16
WORKING TEMPERATURE				
Cooling	°C	-5/43	-5~43	-5~43
Heating	°C	-15/21	-15~21	-15~21

\* 30 m if the outdoor unit is above indoor unit, 20 m if the outdoor unit is below indoor unit.











# FLOWLOGIC II 2-WAY TOP DISCHARGE

Composed of DC Inverter models 10, 12, 14 & 16 HP, this generation of units enables a capacity range from 10 to 48 HP to be covered by combining up to 3 units. This range offers noise pressure levels that vary between 49 and 52 dB(A) with a silent mode, this range is one of the quietest on the market.

## [ PRODUCT ADVANTAGES ]

- The whole range is DC Inverter.
- Capacity range from 10 to 48 HP.
- COP can reach 4.
- 64 indoor units connectable (maximum).
- DC Inverter fan.
- Silent mode: -8 dB(A).
- Power ratio 50-130%.
- Indoor units and control device identical to the Mini FlowLogic range.
- Unit dimensions optimised: it can be transported in elevators.
- De-icing between outdoor units.
- Lead lag operation to maintain equal operating time.
- Wide range of control systems (wireless control devices, touch screen central controller, BMS gateway).





# Efficiency

### **EFFICIENT STRUCTURE**

#### → 4-way air return heat exchanger technology

The compressor and condenser are placed in separated compartments. This structure of outdoor unit can realize lower air resistance, higher heat efficiency and lower noise level.

### **ENERGY SAVING LOCK FUNCTION**

### ightarrow 26°C in cooling mode, 20°C in heating mode, lock function, save operation cost.

Setting temperature fixed to 26°C, the air conditioner operation cost can be reduced by 10%. At the same time, the 26°C is healthy for human body.

### STATIC PRESSURE

→ Up to 80 Pa.

# Installation

### EASY TRANSPORTATION

### Modularized design

The outdoor units take only 0.74 m<sup>2</sup> and 1.04 m<sup>2</sup>, it can be transported in elevators, saving lots of transport cost and time. The outdoor units can be installed in different floors, saving the whole system test time.

### EASY INSTALLATION

### Concise system

Comparing with chiller system, without filter, stop valves, accessory, FlowLogic II units refrigerant piping greatly reduces the system installation work and save a lot of protection and cleaning work.



### Wiring system

A wiring system is used to enable shared use of the wiring between indoor & outdoor units and the central control wiring, with a simple wiring operation. The only work you need to do is to connect the central controller to the outdoor unit directly if central controller is adopted.



# Reliability

## ADVANCED TECHNOLOGY

### More reliable outdoor PCB

All the hardware is evaluated by the expert. Part design according to Japanese design standard. Improves the process, adopting advanced methods advanced method, painted with insulation paint, and tested at high ambient temperature to ensure best quality.



## DUTY CYCLING

### Duty cycling of outdoor units

The outdoor units make no difference between primary unit and secondary unit for the system which consists of more than one unit, the operating turns of units being changed every 8 hours.

Duty cycling of outdoor units could balance the operation hours and life of each outdoor unit in order to extend the system's lifetime.



### First time operation

### Second time operation

Third time operation

### **OPERATION**

### **Backup operation**

If on one outdoor unit malfunction happens the other units backup operation until repair is complete. In one module system, a backup operation can take place in case of fixed speed compressor error. The backup operation could avoid the whole system interruption due to one unit going wrong, it is quite reliable to use.



### Auto checking malfunction

Detailed failure codes displayed by 4x7 LED segments on outdoor PCB or controllers help to find more quickly the failing parts or severity estimation.



These segments also give information such as pressure, current, temperature, etc...

## RELIABLE TEST

### Test in development phase

- $\rightarrow$  Capability and safety test
- → 500 hours salt spray test
- → 6 hours rain test
- → 130% over-match test
- → 300 m pipe length & 50m drop test
- → EMC test

### Test during manufacturing

- → Manufacture test
- → Parts test/Leak test/Operation test/Safety test
- → Outgoing test
- → Visual test/Function test/Capacity test/Acoustic test
- Accessories test



## FLOWLOGIC II TECHNICAL DATA FOR 10, 12, 14 AND 16 HP

Model				AWAU-YCV280-H13	AWAU-YCV335-H13	AWAU-YCV400-H13	AWAU-YCV450-H13
Code				7SP14H002	7SP14H003	7SP14H014	7SP14H015
RATED CA	PACITY						
Cooling			kW	28	33.5	40	45
Heating			kW	31.5	37.5	45	50
ELECTRIC	AL PARA	METERS					
Power suppl	у		Ph/V/Hz	3/380~400/50-60-N	3/380~400/50-60-N	3/380~400/50-60-N	3/380~400/50-60-N
	Casling	Rated/Max current	Α	11.1/23.4	14.2/24.7	19.05/28.5	20.3/31.6
	Cooling	Rated/Max Input power	kW	7.36/14.7	10/15.5	11.4/17.9	13.4/19.99
input power		Rated/Max current	A	12.5/19	15.1/21.7	17.96/24.9	19.3/27.3
	Heating	Rated/Max Input power	kW	7.97/11.9	10/13.6	11.6/15.6	13.5/17.1
EER/COP				3.0/3.95	3.35/3.75	3.51/3.88	3.35/3.70
PERFORM	ANCE						
Airflow (HS)			m³/h	11100	14100	14100	14100
Noise level (I	HS)		dB(A)	57	60	60	60
INSTALLA	ΓΙΟΝ						
External dim	ensions (W	/xDxH)	mm	990x750x1808	1390x750x1808	1390x750x1808	1390x750x1808
Shipping dim	nensions (\	VxDxH)	mm	1090x860x1990	1490x860x1990	1490x860x1990	1490x890x1990
Net/Shipping	g weight		kg	240/255	360/378	360/378	368/386
Compressor	type			Scroll	Scroll	Scroll	Scroll
Refrigerant t	ype			R410A	R410A	R410A	R410A
Refrigerant c	harge		kg	11	12	12	14.5
		Refrigerant liquid pipe	inches	3/8"	1/2"	1/2"	1/2"
Tubing		Refrigerant gas pipe	inches	7/8"	1"	1"	1"1/8
Tubing		Oil equalization pipe	inches	3/8"	3/8"	3/8"	3/8"
		Max. tube length	m	300	300	300	300
Environment		Cooling	°C	-5~43	-5~43	-5~43	-5~43
temperature	range	Heating	°C	-15~21	-15~21	-15~21	-15~21
Maximum in	door units	connectable	quantity	16	19	23	26

## AIRWELL SOLUTIONS



## DIMENSIONS





12P-16P

VRF Outdoor units



## TECHNICAL DATA FOR 10-10 & 10-12 COMBINATION

Model				YCV 560	YCV 615				
				YCV 280/7SP14H002	YCV 280/7SP14H002				
				YCV 280/7SP14H002	YCV 335/7SP14H003				
Combination Model/Code									
RATED CAPACITY									
Cooling			kW	56	61.5				
Heating			kW	63	69				
ELECTRIC	AL PARA	METERS							
Power supply	/		Ph/V/Hz	3/380~400/50-60-N	3/380~400/50-60-N				
	Cooling	Rated/Max current	А	22.2/46.8	25.3/47.75				
Input power	Cooling	Rated/Max Input power	kW	14.72/29.4	17.36/29.91				
input power	Heating	Rated/Max current	А	25/28	27.6/39				
	Treating	Rated/Max Input power	kW	15.94/23.8	24.37/27.6				
EER/COP			3.8/3.95	3.54/2.83					
PERFORM	ANCE								
Airflow (HS)			m³/h	22200	25200				
Noise level (H	IS)		dB(A)	60	78				
INSTALLAT	ION								
External dime	ensions (W	/xDxH)	mm	950x750x1808 + 990x750x1808	990/750/1808 + 1390/750/1808				
Shipping dim	ensions (\	VxDxH)	mm	1090x860x1990 + 1090x860x1990	1090/860/1990 + 1490/860/1990				
Net/Shipping	weight		kg	480/510	600/633				
Compressor	type			Scroll	Scroll				
Refrigerant ty	/pe			R410A	R410A				
Refrigerant c	harge		kg	22	20				
		Refrigerant liquid pipe	inches	5/8"	5/8"				
Tubing		Refrigerant gas pipe	inches	1"1/8	1"1/8				
rubing		Oil equalization pipe	inches	3/8"	3/8"				
		Max. tube length	m	300	300				
Environment		Cooling	°C	-5~43	-5~43				
temperature	range	Heating	°C	-15~21	-15~21				
Maximum indoor units connectable		quantity	33	36					



# 

## TECHNICAL DATA FOR 10-14 COMBINATION

Model				YCV 680				
				YCV 280/7SP14H002				
				YCV 400/7SP14H014				
Combination Model/Code								
RATED CAPACITY								
Cooling			kW	68				
Heating			kW	76.5				
ELECTRIC	AL PARA	METERS						
Power supply	y		Ph/V/Hz	3/380~400/50-60-N				
Cooling	Cooling	Rated/Max current		30.15/51.9				
Input power		Rated/Max Input power		18.76/32.6				
(A)	Heating	Rated/Max current		30.46/43.9				
	Treating	Rated/Max Input power		19.57/27.5				
EER/COP				3.62/3.90				
PERFORM	ANCE							
Airflow (HS)			m³/h	25200				
Noise level (H	HS)		dB(A)	61				
INSTALLAT	ΓΙΟΝ							
External dim	ensions (W	/xDxH)	mm	950x750x1808 + 1390x750x1808				
Shipping dim	ensions (\	VxDxH)	mm	1090x860x1990 + 1490x860x1990				
Net/Shipping	weight		kg	600/633				
Compressor	type			Scroll				
Refrigerant ty	/pe			R410A				
Refrigerant c	harge		kg	23				
		Refrigerant liquid pipe	inches	5/8"				
Tubing		Refrigerant gas pipe	inches	1"1/8				
Tubing		Oil equalization pipe	inches	3/8"				
		Max. tube length	m	300				
Environment		Cooling	°C	-5~43				
temperature	range	Heating	°C	-15~21				
Maximum ind	door units	connectable	quantity	39				



VRF Outdoor units



## TECHNICAL DATA FOR 10-16, 14-14 & 14-16 COMBINATIONS

Model				YCV 730	YCV 800	YCV 850				
				YCV 280/7SP14H002	YCV 400/7SP14H014	YCV 400/7SP14H014				
				YCV 450/7SP14H015	YCV 400/7SP14H014	YCV 450/7SP14H015				
Combination Model/Code										
RATED CA	RATED CAPACITY									
Cooling			kW	73	78.5	85				
Heating			kW	81.5	87.5	95				
ELECTRIC	AL PARA	METERS								
Power supply	/		Ph/V/Hz	3/380~400/50-60-N	3/380~400/50-60-N	3/380~400/50-60-N				
Input power	Cooling	Rated/Max current		31.4/55	34.5/56.3	39.35/60.1				
	Cooling	Rated/Max Input power		20.76/34.69	23.4/35.49	24.8/37.89				
(A)	Heating	Rated/Max current		31.8/46.3	34.4/49	37.26/52.2				
	пеашу	Rated/Max Input power		21.47/29	23.5/30.7	25.1/32.7				
EER/COP			3.52/3.79	3.35/3.72	3.43/3.78					
PERFORM	ANCE									
Airflow (HS)			m³/h	25200	28200	28200				
Noise level (H	IS)		dB(A)	61 62		62				
INSTALLAT	ION									
External dime	ensions (W	/xDxH)	mm	950x750x1808 + 1390x750x1808	1390x750x1808 + 1390x750x1808	1390x750x1808 + 1390x750x1808				
Shipping dim	ensions (V	VxDxH)	mm	1090x860x1990 + 1490x860x1990	1490x860x1990 + 1490x860x1990	1490x860x1990 + 1490x860x1990				
Net/Shipping	weight		kg	608/641	728/756	728/764				
Compressor	type			Scroll	Scroll	Scroll				
Refrigerant ty	vpe			R410A	R410A	R410A				
Refrigerant c	harge		kg	25.5	26.5	26.5				
		Refrigerant liquid pipe	inches	3/4"	3/4"	3/4"				
Tubing		Refrigerant gas pipe	inches	1"1/4	1"1/4	1"1/4				
Tubing		Oil equalization pipe	inches	3/8"	3/8"	3/8"				
		Max. tube length	m	300	300	300				
Environment		Cooling	°C	-5~43	-5~43	-5~43				
temperature	range	Heating	°C	-15~21	-15~21	-15~21				
Maximum inc	loor units	connectable	quantity	43	46	50				



## TECHNICAL DATA FOR 16-16, 10-10-14 & 10-10-16 COMBINATIONS

Model				YCV 900	YCV 960	YCV 1010	
				YCV 450/7SP14H015	YCV 280/7SP14H002	YCV 280/7SP14H002	
				YCV 450/7SP14H015	YCV 280/7SP14H002	YCV 280/7SP14H002	
				-	YCV 400/7SP14H014	YCV 450/7SP14H015	
Combination Model/Code							
RATED CA	PACITY					1	
Cooling			kW	90	96	101	
Heating			kW	100	108	113	
ELECTRIC	AL PARA	METERS				1	
Power supply	y		Ph/V/Hz	3/380~400/50-60-N	3/380~400/50-60-N	3/380~400/50-60-N	
Input power (A)	Cooling	Rated/Max current		40.6/63.2	41.25/75.3	42.5/78.4	
	Cooling	Rated/Max Input power		26.8/39.98	26.12/47.3	28.12/49.39	
	Heating	Rated/Max current		38.6/54.6	42.96/62.9	44.3/65.3	
	Tleating	Rated/Max Input power		27/34.2	27.54/39.4	29.4/40.9	
EER/COP			3.36/3.70	3.67/3.92	3.59/3.84		
PERFORM	ANCE						
Airflow (HS)			m³/h	28200	36300	36300	
Noise level (H	HS)		dB(A)	62	63	63	
INSTALLAT	ΓΙΟΝ						
External dime	ensions (V	/xDxH)	mm	1390x750x1808 + 1390x750x1808	950x750x1808 + 950x750x1808 + 1390x750x1808	950x750x1808 + 950x750x1808 + 1390x750x1808	
Shipping dim	iensions (\	WxDxH)	mm	1490x860x1990 + 1490x860x1990	1090x860x1990 + 1090x860x1990 + 1490x860x1990	1090x860x1990 + 1090x860x1990 + 1490x860x1990	
Net/Shipping	y weight		kg	736/772	840/888	848/896	
Compressor	type			Scroll	Scroll	Scroll	
Refrigerant ty	ype			R410A	R410A	R410A	
Refrigerant c	harge		kg	29	34	36.5	
		Refrigerant liquid pipe	inches	3/4"	3/4"	3/4"	
		Refrigerant gas pipe	inches	1"1/4	1"1/4	1"1/2	
lubing		Oil equalization pipe	inches	3/8"	3/8"	3/8"	
		Max. tube length	m	300	300	300	
Environment		Cooling	°C	-5~43	-5~43	-5~43	
temperature	range	Heating	°C	-15~21	-15~21	-15~21	
Maximum indoor units connectable		quantity	53	56	59		



# Airwell Just feel

## TECHNICAL DATA FOR 10-14-14, 10-14-16 & 10-16-16 COMBINATIONS

Model				YCV 1080	YCV 1130	YCV 1180	
				YCV 280/7SP14H002	YCV 280/7SP14H002	YCV 280/7SP14H002	
				YCV 400/7SP14H014	YCV 400/7SP14H014	YCV 450/7SP14H015	
				YCV 400/7SP14H014	YCV 450/7SP14H015	YCV 450/7SP14H015	
Combination Model/Code							
RATED CA	PACITY						
Cooling			kW	106.5	113	118	
Heating			kW	119	126.5	131.5	
ELECTRIC	AL PARA	METERS					
Power suppl	у		Ph/V/Hz	3/380~400/50-60-N	3/380~400/50-60-N	3/380~400/50-60-N	
(A)	Cooling	Rated/Max current		45.6/79.7	50.45/83.5	51.7/86.6	
	Cooling	Rated/Max Input power		30.76/50.19	32.16/52.69	34.16/54.68	
	Heating	Rated/Max current		46.9/68	49.76/71.2	51.1/73.6	
	пеашу	Rated/Max Input power		31.47/42.6	33.07/44.6	34.97/46.1	
EER/COP			3.46/3.78	3.51/3.82	3.45/3.76		
PERFORM	ANCE						
Airflow (HS)			m³/h	39300	39300	39300	
Noise level (H	HS)		dB(A)	63	63	63	
INSTALLAT	ΓΙΟΝ						
External dim	ensions (W	/xDxH)	mm	950x750x1808 + 1390x750x1808 + 1390x750x1808	950x750x1808 + 1390x750x1808 + 1390x750x1808	950x750x1808 + 1390x750x1808 + 1390x750x1808	
Shipping dim	nensions (\	NxDxH)	mm	1090x860x1990 + 1490x860x1990 + 1490x860x1990	1090x860x1990 + 1490x860x1990 + 1490x860x1990	1090x860x1990 + 1490x860x1990 + 1490x860x1990	
Net/Shipping	y weight		kg	968/1011	968/1019	976/1027	
Compressor	type			Scroll	Scroll	Scroll	
Refrigerant ty	ype			R410A	R410A	R410A	
Refrigerant c	harge		kg	37.5	37.5	40	
		Refrigerant liquid pipe	inches	3/4"	3/4"	3/4"	
Tubies		Refrigerant gas pipe	inches	1"1/2	1"1/2	1"1/2	
gniau i		Oil equalization pipe	inches	3/8"	3/8"	3/8"	
		Max. tube length	m	300	300	300	
Environment		Cooling	°C	-5~43	-5~43	-5~43	
temperature	range	Heating	°C	-15~21	-15~21	-15~21	
Maximum ind	door units	connectable	quantity	63	64	64	



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## TECHNICAL DATA FOR 12-16-16, 14-16-16 & 16-16-16 COMBINATIONS

Model				YCV 1235	YCV 1300	YCV 1350			
				YCV 335/7SP14H003	YCV 400/7SP14H014	YCV 450/7SP14H015			
				YCV 450/7SP14H015	YCV 450/7SP14H015	YCV 450/7SP14H015			
				YCV 450/7SP14H015	YCV 450/7SP14H015	YCV 450/7SP14H015			
Combination Model/Code									
RATED CA	PACITY					1			
Cooling			kW	123.5	130	135			
Heating			kW	137.5	145	150			
ELECTRIC	AL PARA	METERS							
Power supply	y		Ph/V/Hz	3/380~400/50-60-N	3/380~400/50-60-N	3/380~400/50-60-N			
Input power (A)	Cooling	Rated/Max current		54.8/92.64	59.65/91.7	60.9/94.8			
		Rated/Max Input power		36.8/58.5	38.2/57.88	40.2/59.97			
	Heating	Rated/Max current		53.7/80.1	56.56/79.5	57.9/81.9			
	ricuting	Rated/Max Input power		37/50.2	38.6/49.8	40.5/51.3			
EER/COP			3.35/3.72	3.40/3.75	3.35/3.70				
PERFORM	ANCE								
Airflow (HS)			m³/h	42300	42300	42300			
Noise level (H	HS)		dB(A)	64 64		64			
INSTALLAT	ΓΙΟΝ								
External dime	ensions (W	/xDxH)	mm	1390x750x1808+ 1390x750x1808+ 1390x750x1808	1390x750x1808 + 1390x750x1808 + 1390x750x1808	1390x750x1808 + 1390x750x1808 + 1390x750x1808			
Shipping dim	iensions (\	NxDxH)	mm	1490x860x1990+ 1490x860x1990+ 1490x860x1990	1490x860x1990 + 1490x860x1990 + 1490x860x1990	1490x860x1990 + 1490x860x1990 + 1490x860x1990			
Net/Shipping	y weight		kg	1096/1150	1096/1150	1104/1158			
Compressor	type			Scroll	Scroll	Scroll			
Refrigerant ty	/pe			R410A	R410A	R410A			
Refrigerant c	harge		kg	30	41	43.5			
		Refrigerant liquid pipe	inches	3/4"	3/4"	3/4"			
Tubing		Refrigerant gas pipe	inches	1"1/2	1"1/2	1"1/2			
rubing		Oil equalization pipe	inches	3/8"	3/8"	3/8"			
		Max. tube length	m	300	300	300			
Environment		Cooling	°C	-5~43	-5~43	-5~43			
temperature	range	Heating	°C	-15~21	-15~21	-15~21			
Maximum indoor units connectable		quantity	64	64	64				



VRF Indoor units







# HAV HIGH WALL



- → EEV inside : for an easier installation.
  → High-quality DC fan motor: Reduce the indoor unit noise greatly.
- → Fashion design.
- → Infrared remote controller included.





## HAV TECHNICAL DATA

Indoor units		AWSI-HAV007-N11	AWSI-HAV009-N11	AWSI-HAV012-N11	AWSI-HAV018-N11	AWSI-HAV024-N11			
Code		7SP02H001	7SP02H002	7SP02H003	7SP02H005	7SP02H006			
RATED CAPACITY									
Cooling	kBtu/h	7.5	9.5	12.3	19.1	24.2			
Cooling	kW	2.2	2.8	3.6	5.6	7.1			
Veeting	kBtu/h	8.5	10.9	13.6	21.5	27.3			
neating	kW	2.5	3.2	4	6.3	8			
ELECTRICAL PARAMETERS									
Power supply	Ph/V/Hz	1/220~230/50	1/220~230/50	1/220~230/50	1/220~230/50	1/220~230/50			
PERFORMANCE									
Airflow	m³/h	600	600	600	800	1000			
Noise level (LS/MS/HS)	dB(A)	31/33/37	31/34/37	33/36/41	34/39/43	38/42/47			
INSTALLATION									
External dimensions (WxHxD)	mm	938x265x187	938x265x187	938x265x187	1046x299x234	1046x299x234			
Shipping dimensions (WxHxD)	mm	1016x360x304	1016x360x304	1016x360x304	1126x388x344	1126x388x344			
Net/Shipping weight	kg	10.9/12.6	10.9/12.6	10.9/12.6	13/16.5	13/16.5			
Refrigerant liquid pipe	inches	1/4"	1/4"	1/4"	3/8"	3/8"			
Refrigerant gas pipe	inches	1/2"	1/2"	1/2"	5/8"	5/8"			

Please contact Airwell before ordering unit with wired control application option.

## **AIRWELL SOLUTIONS**



Dimensions: 007-009-012 models



Dimensions: 018-024 models







### UPGRADE

# CASSETTE 600x600

- $\rightarrow$  Built-in high head drain pump.
- → Wired controller RWV01 included.
- Automatic swing.

## [PRODUCT ADVANTAGES]

- The cassette external dimension is 570x570x260mm for easy installation. It is universal and in harmony with standard ceiling 600x600mm. There is no ceiling alteration during installation.
- Airflow pass through the outlet smoothly and fluently owing to the streamline air outlet. Bringing you a much more quiet space. The fan blade adopts the design of irregular helix. The indoor unit can run at the lowest sound level.
- Built-in high head pump drains water automatically. A standard drain-head height of up to 600 mm is possible, creating the ideal solution for perfect water drainage.
- Pre-set fresh air inlet, can introduce the outside fresh air into the room, greatly improving the indoor air quality: 10-15% fresh air (maximum recommended).

## **CBV TECHNICAL DATA**

Indoor units		AWSI-CBV007-N11	AWSI-CBV009-N11	AWSI-CBV012-N11	AWSI-CBV016-N11			
Code		7SP04H000	7SP04H001	7SP04H002	7SP04H003			
RATED CAPACITY								
Cooling	kBtu/h	7.5	9.5	12.3	15.3			
Cooling	kW	2.2	2.8	3.6	4.5			
Hasting	kBtu/h	8.5	10.9	13.6	17.1			
neating	kW	2.5	3.2	4	5			
ELECTRICAL PARAMETERS								
Power supply	Ph/V/Hz	1/220~230/50	1/220~230/50	1/220~230/50	1/220~230/50			
PERFORMANCE								
Airflow	m³/h	700	700	700	700			
Noise level (LS/MS/HS)	dB(A)	29/30/32	29/30/32	29/30/32	29/30/33			
INSTALLATION								
External dimensions (WxHxD)	mm	570x570x260	570x570x260	570x570x260	570x570x260			
Shipping dimensions (WxHxD)	mm	718x680x380	718x680x380	718x680x380	718x680x380			
Net/Shipping weight	kg	17/21	19/21	19/21	19/21			
Refrigerant liquid pipe	inches	1/4"	1/4"	1/4"	1/4"			
Refrigerant gas pipe	inches	3/8"	3/8"	1/2"	1/2"			
PANEL	PANEL							
Code panel		7ACVFH001	7ACVFH001	7ACVFH001	7ACVFH001			
External dimensions (WxHxD)	mm	700x700x60	700x700x60	700x700x60	700x700x60			
Shipping dimensions (WxHxD)	mm	740x750x115	740x750x115	740x750x115	740x750x115			
Net/Shipping weight	kg	2.8/4.5	2.8/4.8	2.8/4.8	2.8/4.8			



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### RCV02 (optional)







R\////04 (optional)

## **AIRWELL SOLUTIONS**



Dimensions: 007-009-012-016 models











## CCV CASSETTE 900x900

- Compact design.
- → Advance structure facilitating cleaning and installation.
- $\rightarrow$  Fresh air inlet.
- $\rightarrow$  EEV inside.
- → Wired controller RWV01 included.
- $\rightarrow$  Automatic swing.
- → IR receipt included.



## [PRODUCT ADVANTAGES]

- Adopts the compact design: the thick of the main body is only 240 mm. So even the inner space of the ceiling is narrow the unit can also be installed easily.
- The suction grid can be rotated by 90° and its installation direction can be selected randomly.
- Pre-set fresh air inlet, can introduce the outside fresh air into the room, greatly improving the indoor air quality: 10-15% fresh air (maximum recommended).
- From small to big size, use the same appearance panel, in harmony with the environment.

## CCV TECHNICAL DATA

Indoor units		AWSI-CCV018-N11	AWSI-CCV024-N11	AWSI-CCV030-N11	AWSI-CCV048-N11				
Code		7SP04H004	7SP04H005	7SP04H007	7SP04H009				
RATED CAPACITY									
Cooling	kBtu/h	19.1	24.2	30.7	47.7				
Cooling	kW	5.6	7.1	9	14				
Heating	kBtu/h	21.5	27.3	34.1	54.6				
nearing	kW	6.3	8	10	16				
ELECTRICAL PARAMETERS									
Power supply	Ph/V/Hz	1/220~230/50	1/220~230/50	1/220~230/50	1/220~230/50				
PERFORMANCE									
Airflow	m³/h	1200	1200	1800	1800				
Noise level (LS/MS/HS)	dB(A)	30/32/34	31/35/34	31/35/37	35/39/42				
INSTALLATION									
External dimensions (WxHxD)	mm	840x840x240	840x840x240	840x840x295	840x840x295				
Shipping dimensions (WxHxD)	mm	930x930x330	930x930x330	930x930x390	930x930x390				
Net/Shipping weight	kg	30/36	30/36	38/40	38/40				
Refrigerant liquid pipe	inches	1/4"	3/8"	3/8"	3/8"				
Refrigerant gas pipe	inches	1/2"	5/8"	5/8"	5/8"				
PANEL	PANEL								
Code panel		7ACVFH002	7ACVFH002	7ACVFH002	7ACVFH002				
External dimensions (WxHxD)	mm	950x950x80	950x950x80	950x950x80	950x950x80				
Shipping dimensions (WxHxD)	mm	985x985x115	985x985x115	985x985x115	985x985x115				
Net/Shipping weight	ka	6/9	6/9	6/9	6/9				

### **AIRWELL SOLUTIONS**



#### Dimensions: 018-024-030-048 models







RCV02 (optional)



RWV/03 (optional)



RWV04 (optional)

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## FAV FLOOR CEILING

- → Ultra-thin unit body, only thick 199 mm.
- $\rightarrow$  Wide-angle airflow.
- → Quiet running.
- $\rightarrow$  EEV inside.
- → Wired controller RWV01 included.
- → Automatic swing.

## [PRODUCT ADVANTAGES]

- The convertible indoor unit adopts a double drain pan design. The unit body is very thin, only 199mm. It is beautiful, elegant and space saving.
- 100° wide angle louvers and 70° wide angle blades design allow a precise control of the airflow. It averagely distributes the comfortable air to every corner of the room.
- Thanks to the low sound level centrifugal fan, the unit always works quietly so as to give more comfort to life.

## FAV TECHNICAL DATA

Indoor units		AWSI-FAV012-N11	AWSI-FAV018-N11	AWSI-FAV024-N11				
Code		7SP02H008	7SP02H010	7SP02H011				
RATED CAPACITY								
Cooling	kBtu/h	12.3	19.1	24.2				
Cooling	kW	3.6	5.6	7.1				
Hasting	kBtu/h	13.6	21.5	27.3				
neating	kW	4	6.3	8				
ELECTRICAL PARAMETERS								
Power supply	Ph/V/Hz	1/220~230/50	1/220~230/50	1/220~230/50				
PERFORMANCE								
Airflow	m³/h	800	800	800				
Noise level (LS/MS/HS)	dB(A)	44/46/48	44/46/48	44/46/48				
INSTALLATION								
External dimensions (WxHxD)	mm	990x665x199	990x655x199	990x665x199				
Shipping dimensions (WxHxD)	mm	1150x750x300	1150x750x300	1150x750x300				
Net/Shipping weight	kg	28.3/34.3	28.3/34.3	28.3/34.3				
Refrigerant liquid pipe	inches	1/4"	1/4"	3/8"				
Refrigerant gas pipe	inches	1/2"	1/2"	5/8"				







(optional)







RWV04 (optional)

### AIRWELL SOLUTIONS



Dimensions: 012-018-024 models











#### DAVUIC



## DAV DUCTED LOW STATIC PRESSURE

- - $\rightarrow$  220 ultra thin design and space saving.
  - Optional air return design.
  - $\rightarrow$  High efficiency filter G3.
  - → EEV inside.
  - Wired controller RWV01 included on standard.
  - → Ideal for hotel.

inches

Ра



RWV01 (STD)

## [PRODUCT ADVANTAGES]

- Ultra thick design allows all the models having only 220 mm height, more convenient for installation and maintenance.
- Once the indoor unit placed in the ceiling, only the inlet and outlet grids can be seen. The most suited grid can be used to fit the indoor decoration.
- There are two air return design for different requirements for even more decoration options
- Two choices of optional static pressure 0 Pa and 20 Pa for the low static pressure duct for a convenient use.
- The unit adopts G3 grade filter which can efficiently filter the dirt etc., and improve the room air quality. At the same time, the filter can be pulled out from downside, convenient for maintenance and cleaning.



RCV02 (optional)

### (infrared receiver to

combined with RCV 01)



RWV03 (optional)



RWV04 (optional)



3/8'

20

## AIRWELL SOLUTIONS

Refrigerant gas pipe

Static pressure



### Dimensions: 009-012 models

3/8'

20

3/8'

20



Dimensions: 016 model





# **DBV** DUCTED MEDIUM STATIC PRESSURE

- → Flexible static pressure selection, meeting the customers' personal requests.
- → High efficiency filter G3.
- → Special up-drainage water pump.
- → EEV inside.
- → Wired controller RWV01 included.
- $\rightarrow$  Plenum for air outlet provided: 3 Ø200 sizes 018 and 028,
  - 4 Ø200 size 038.

## [PRODUCT ADVANTAGES]

DBV 018-028

DBV 038

- The unit has standard static pressure (0-50 Pa) & middle static pressure (50-96 Pa) two choices, flexible air supply mode, for an installation more flexible to meet different personal requests.
- The unit adopts G3 grade filter which can efficiently filter the dirt etc., and improve the room air quality. At the same time, the filter can be pulled out from downside, convenient for maintenance and cleaning.
- The unit has a water pump whose the max. drainage height can be up to 600 mm.



## DBV TECHNICAL DATA

Indoor units		AWSI-DBV018-N11	AWSI-DBV024-N11	AWSI-DBV028-N11	AWSI-DBV038-N11				
Code		7SP03H007	7SP03H008	7SP03H009	7SP03H011				
RATED CAPACITY									
Cooling	kBtu/h	19.1	24.2	27.3	38.2				
Cooling	kW	5.6	7.1	8	11.2				
Usetine	kBtu/h	21.5	27.3	30.7	42.6				
neating	kW	6.3	8	9	12.5				
ELECTRICAL PARAMETERS									
Power supply	Ph/V/Hz	1/220~230/50	1/220~230/50	1/220~230/50	1/220~230/50				
PERFORMANCE									
Airflow	m³/h	1200	1200	1200	1900				
Noise level (LS/MS/HS)	dB(A)	35/37/43	35/37/43	35/37/43	35/37/43				
INSTALLATION									
External dimensions (WxHxD)	mm	990x650x300	990x650x300	990x650x300	1410x645x350				
Shipping dimensions (WxHxD)	mm	1167x860x345	1167x860x345	1167x860x345	1557x800x370				
Net/Shipping weight	kg	39/45	39/45	39/45	59/66				
Refrigerant liquid pipe	inches	1/4"	3/8"	3/8"	3/8"				
Refrigerant gas pipe	inches	1/2"	5/8"	5/8"	5/8"				
Static pressure	Pa	50	50	50	50				
Max. static pressure	Pa	96	96	96	96				







(infrared receiver to combined with RCV 01)



RWV03 (optional)



RWV04 (optional)

## AIRWELL SOLUTIONS



### Dimensions: 018-024-028 models













DCV 072-096





DCV

→ High efficiency filter.

→ Multi install mode.

→ Free setting of air discharge duct.

→ High external static pressure design.

The number of airflow outlets and its installation position can be freely selected according to the environment of the room, sufficiently considering the load of the room and the uniform temperature of the room to achieve a better comfort.

DUCTED HIGH STATIC PRESSURE

- The indoor unit can be installed with an air return duct or without an air return duct according to the installation need.
- Max. external static pressure of 196 Pa brings the quick temperature adjustment to the room. Adopts high pressure fan to provide quick speed of air blowing while keeping a low sound level and ensuring a good air circulation of the whole indoor space.
- The unit adopts G3 grade filter which can efficiently filter the dirt etc., and improve the room air quality. At the same time, the filter can be pulled out from downside, convenient for maintenance and cleaning.



## DCV TECHNICAL DATA

Indoor unit		AWSI-DCV048-N11	AWSI-DCV072-N11	AWSI-DCV096-N11		
Code		7SP03H018	7SP03H019	7SP03H020		
RATED CAPACITY						
Cooling	kBtu/h	47.7	77.1	95.5		
Cooling	kW	14	22.6	28		
Heating	kBtu/h	54.6	85.3	108.5		
neaung	kW	16	25	31.5		
ELECTRICAL PARAMETERS						
Power supply	Ph/V/Hz	1/220~230/50	1/220~230/50	1/220~230/50		
PERFORMANCE						
Airflow	m³/h	2100	4050	4050		
Noise level (LS/HS)	dB(A)	40/45	49/54	49/54		
INSTALLATION						
External dimensions (WxHxD)	mm	1197x360x830	1570x360x880	1570x360x880		
Shipping dimensions (WxHxD)	mm	1430x420x940	1800x525x1000	1800x525x1000		
Net/Shipping weight	kg	62/77	100/111	100/111		
Refrigerant liquid pipe	inches	3/8"	3/8"	3/8"		
Refrigerant gas pipe	inches	5/8"	5/8" x 2	5/8" x 2		
Static pressure	Pa	196	196	196		

### AIRWELL SOLUTIONS





Dimensions: 072-096 models



# RWV01 (STD)







RWV04 (optional)



tional)

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## [ PRODUCT ADVANTAGES ]

- The unit adopts high efficiency filter, which can efficiently filter the dirt etc., and improve the room air quality.
- Thanks to the low sound level centrifugal fan, the unit always works quietly so as to give more comfort.
- The unit body is very thin and harmonious with room. It is beautiful, elegant and space saving.
- Air supplying from top or the bottom of the unit body for fast temperature adjustment.

## EAV TECHNICAL DATA

Indoor unit		AWSI-EAV012-N11
Code		7SP05H002
RATED CAPACITY		
Cooling	kBtu/h	12.3
Cooling	kW	3.6
Heating	kBtu/h	13.6
neaulig	kW	4
ELECTRICAL PARAMETERS		
Power supply	Ph/V/Hz	1/220~230/50
PERFORMANCE		
Airflow	m³/h	520
Noise level (LS/MS/HS)	dB(A)	36/39/43
INSTALLATION		
External dimensions (WxHxD)	mm	762x640x253
Shipping dimensions (WxHxD)	mm	784x719x305
Net/Shipping weight	kg	18/20
Refrigerant liquid pipe	inches	1/4"
Refrigerant gas pipe	inches	1/2"

### AIRWELL SOLUTIONS



### Dimensions: 012 model





VRF

## Airwell

# AHU Connection Kit

Airwell offers a range of connection kit to connect VRF outdoor units to third party DX air handling units.

### CONFIGURATION BETWEEN 14 AND 28 KW



5 HP (14 kW) < Connected AHU capacity  $\leq$  10 HP (28 kW)

AHU and direct expansion coil to be purchased through other supplier

### CONFIGURATION BETWEEN 28 AND 56 KW



10 HP (28 kW) < Connected AHU capacity  $\leq$  20 HP (56 kW)

AHU and direct expansion coil to be purchased through other supplier

### VRF OUTDOOR LINE UP

OUTDOOR	MINI FLOW LOGIC II		FLOW I	OGIC II		
Modèle	AWAU-YCVFD280-H13	AWAU-YCV280-H13	AWAUYCV335-H13	AWAU-YCV400-H13	AWAU-YCV450-H13	
HP	10	10	12	14	16	
kW	28	28	33.5	40	45	
Power supply	3/380~400V/50Hz 3/380~400V/60Hz		3/380~40 3/380~40 3/220\ 3/460\	00V/50Hz 00V/60Hz //60Hz //60Hz		
	7ACELH015		7ACELH016			
	5 HP (14 kW) < Connected AHU capa	acity $\leq$ 10 HP (28 kW)	10 HP (28 kW) < Connected AHU capacity $\leq$ 20 HP (56 kW)			

Airwell, Just feel well

### SYSTEM APPLICATION

Provide a solution for big space to cool down the supplied fresh air with VRF outdoor units to match the air handling units. Integrated the advantages of VRF and AHU units.

EU legislation requires that every working place has to be supplied with a minimum of 25 m<sup>3</sup>/h of fresh air. So it means that every office, every shop and mostly every commercial building MUST have this solution, in order to comply with the standard.







Hospital

## AHU KIT CONFIGURATION

Airwell AHU Connection Kit consists the following 4 parts:



EXV part, Control part, Sensor and wire are all integrated in one box.

Controller need to be purchased separately.



### WIRING DIAGRAM



### **CONNECTION KIT CONTROL**

Airwell

Central Control: AHU control is same as VRF indoor unit control.



### **Easy Installation**

- Adopting the VRF outdoor, not the traditional chiller outdoor system, is easier to design and install since no additional water system such as boilers, gas connections, cooling tower etc. are required. This also reduces the total system cost.
- AHU can provide enough cooled fresh air to big space other than HRV and fresh air indoor units.
- All the control system for VRF outdoor is available:
  - Wired control
  - Central control
  - Net work control
  - BMS control

### **ADVANTAGES & SPECIFICATION**

- Connected AHU capacity from 5HP to 20HP.
- High Compatible 1. Same PCB board with VRF indoor, easy operation and service.
- Same wired controller can be used with VRF indoor unit.



# Central control solutions

## TOUCH SCREEN CENTRAL REMOTE CONTROL RWV02

Can control and monitor the indoor units conditions, with a maximum of 128 groups, each group connected to a maximum of 16 indoor units. All the controls, such as individual control, zone control, time setting, timer setting etc., can be realized by touch screen. Connecting diagram as follows:

200				-
68				
6.9				
12			ño	
100	11			

### Main functions are:

Airwell

- → Can monitor a maximum of 128 groups of indoor units: operation mode, airflow speed, temp., setting, ON/OFF, error code display, etc. condition.
- → Can program mode, airflow speed, temp., etc. for individual/zone/all.
- → Can check indoor unit real temp., pipe temp. etc. parameters.
- → Can set LIFO (Last enter have high priority), central control, lock, etc., 3 types of operation modes.
- → Can monitor the indoor units malfunction and save the error code for future checking.
- → Weekly timer setting.
- → Can set random units groups to one zone, with a maximum of 128 groups for one zone. When a zone is set, each indoor unit in this zone can have a same operation status (default setting: one group is one zone).



AIRWELL BMS CONTROL (Building Modelling System)

BMS system transfers the data of air conditioner to the computer through the inverter protocol adapter (ADV02), and the user can:

- → Monitor the operation status and the power consumption of indoor and outdoor in real time on a computer interface.
- $\rightarrow$  Set the parameter of system in time.
- → Start or stop each indoor individually or a group as per request.
- $\rightarrow$  Receive the alarm and perform measurments in real time.
- → Deal with the data and produces some costs and account reports.

Max. 32 ADV02 can be connected and 40 indoor units by one inverter protocol adapter (ADV02) (so a total of 1280 indoor units).



### APPLICABLE FOR VRF SYSTEM

### System combination

- → Inverter protocol adapter (ADV02): Transforms the air conditioner protocol into protocol 485; receives ammeter pulse signal; accounts and saves the power cost of the connected system, then transfers it to the computer.
- Software: parameter displays and human computer interface, and calculates and records power costs for accounting reports.
- → RS 485&232 converter (hardware), Item 2 & 3 name is BMV01.

### Control range

- → Pay attention that the indoor quantity of every system cannot be over 40 sets. Or the adapter can not work normally.
- → Every system needs one protocol adapter.
- → One computer can control indoors within 400 sets.

### APPLICABLE RANGE AND RELATIVE CERTIFICATE

#### Applicable range

- → Temp. range: -30°C~52°C
- → Ambient temperature of controller: -30°C~52°C
- → Ambient humidity of controller: 10%~85%
- → Save temp. range of controller: -30°C~52°C
- → Altitude: 0~6000m
- $\rightarrow$  Voltage: 220Vac±10%
- → Frequency: 50Hz

Part number ADV02 : 7ACELH007 Part number BMV01 : 7ACELH005 Airwell

## BACNET BMS CONTROL

### BMV03 Network Airwell A/C management system

- → Total actual connected indoor units quantity is max 1000.
- → Internet remote control.
- $\rightarrow$  To be purchased through external supplier by dealer/customer:
- computer display,
  - energy pulse meter and printer if calculating the power consumption is required.
- → Interface: BACnet.

Airwell



Part number BMV03 : 7ACELH013 Part number ADV02 : 7ACELH007

## MODBUS BMS CONTROL



→ Connect ADV03 to the outdoor unit to change the homebus protocol to Modbus protocol.



Part number ADV03 : 7ACELH011

## LONWORKS BMS CONTROL

	(manual)	
21		0
	The states	

- → Every outdoor system adopt one ADV04 + ADV03
- $\rightarrow$  In one system, total connected indoor units quantity is max. 32
- The ADV04 needs connect external 24V DC power supply



VRF Accessories



[ NA	ME	Photo	Part number	Model
	INFRARED CONTROLLER		7ACELH022	RCV02
	INFRARED CONTROLLER RECEIVER		7ACELH009	REC01
	WIRED STANDARD CONTROLLER		7ACELH002	RWV01
	SIMPLIFIED CONTROLLER		7ACELH008	RWV03
	WIRED CONTROL WEEKLY TIMER	24	7ACELH010	RWV04
LERS	CENTRAL CONTROLLER "TOUCH SCREEN"		7ACELH003	RWV02
ITROL	CONNECTING BOARD		7ACELH004	ADV01
CO	INVERTER PROTOCOL ADAPTATER		7ACELH007	ADV02
	MODBUS GATEWAY		7ACELH011	ADV03
	LONWORKS GATEWAY		7ACELH012	ADV04
	RS485&232 CONVERTER + SOFTWARE	Ges. atl	7ACELH005	BMV01
	PROTOCOL BACNET IP/MSTP + PROTOCOL MODBUS RTU/TCP		7ACELH013	BMV03
	TEST TOOL FOR VRF 15 AND 18 KW		7ACELH020	-
	GATHER PIPE	Z	7ACFHH005	TAS20
SORIES	GATHER PIPE	HH	7ACFHH006	TAS30
CCES	MANIFOLD PIPE	11	7ACFHH001	TAU335
ING A	MANIFOLD PIPE	11	7ACFHH002	TAU506
TUB	MANIFOLD PIPE	11	7ACFHH003	TAU730
	MANIFOLD PIPE	11	7ACFHH004	TAU1350

[FOR WHAT UNITS?] [OPTIONAL/COMMENTS]

FUNCTION

Unit operating	All indoor units	Standard with high wall and console Optional with cassette and ducted	
Realize infrared control for duct type	Ducted	-	
Unit operating, group control (max. 16 indoor units) and "I Feel" function.	High wall, ducted cassette, floor ceiling	Standard with cassette, ducted and floor ceiling	
Unit operating and group control (max. 16 indoor units)	All (except for console type)	-	
Single unit control, group control, max. 16 units, weekly timer, clock, mode cooling/ heating/auto/airflow/dehumidification, temperature, fan speed, fan direction	High wall, cassette, ducted, floor ceiling	-	
ON/OFF function & malfunction code display (max. 128 groups) Zone, timer, central control mode	Mini FlowLogic II FlowLogic II	Mandatory with ADV01	
Connecting RWV02 and outdoor units	Mini FlowLogic II FlowLogic II	Mandatory with RWV02	
Protocol adapter and data storeage	Mini FlowLogic II FlowLogic II	Mandatory with BMV01 and BMV03	
Connect the outdoor unit to change the homebus protocol to Modbus protocol.	Mini FlowLogic II FlowLogic II	-	
Every outdoor system adopt one ADV04 + ADV03. In one system, total connected indoor units quantity is max. 32. The ADV04 need connect external 24V DC power supply	Mini FlowLogic II FlowLogic II	Mandatory with ADV03	
BMS control (air conditioner edition) In one system, total connected indoor units quantity is max. 40.	Mini FlowLogic II FlowLogic II	Mandatory with ADV02	
BMS control (BACnet protocol edition)	Mini FlowLogic II FlowLogic II	Mandatory with ADV02	
Useful during process of installation or maintenance, the whole system's operating parameters can be tested.	YCV 150 YCV 180	-	
Refrigerant gathering	Mini FlowLogic II FlowLogic II	For 2 outdoor units	
Refrigerant gathering	Mini FlowLogic II FlowLogic II	For 3 outdoor units	
Refrigerant distribution	Total indoor units capacity less than 33.5 kW	-	
Refrigerant distribution	Total indoor units capacity less than 50.6 kW, - but equal or bigger than 33.5 kW		
Refrigerant distribution	Total indoor units capacity less than 73 kW, but equal or bigger than 50.6 kW	-	
Refrigerant distribution	Total indoor units capacity bigger than 73 kW	-	

Airwell, Just feel well

# Systèmes de contrôle

Function: Part number:	RCV02 Infrared light control 7ACELH022	RWV01 Wired Touch control / Order Control 7ACELH002	RWV04 Wired control 7ACELH010	RWV03 Simplified control 7ACELH008
[ MODEL NAME ]			24	
HAV	۲	۲		
CBV	۲	۲	۲	۲
CCV	۲	۲	۲	۲
FAV	۲	۲	۲	۲
DAV	۲	۲	۲	۲
DBV	۲	۲	۲	۲
DCV	۲	۲	۲	۲
EAV	۲			

Controller as standard

Optional controller

