





CELEBRATING ITS 75th ANNIVERSARY and becomes a French group again

# GROUPE AIRWELL

Promising times in store for a historic brand created in 1947, and which has retained its DNA ever since:

**RELIABILITY • SERVICE • PARTNERSHIP • INNOVATION** 

#### **OUR PRODUCTS**

- Air/water range
- Air/air range
- Water-cooled range
- Tertiary and industrial range
- Solar range

#### **OUR CERTIFICATIONS**

• **Airwell** participates in the ECP programme for AC1. Check ongoing validity of certificate: www.eurovent-certification.com



 Company compliant with standard ISO 9001



#### **IN FIGURES**

- 1st european manufacturer for air conditioning and heat pumps
- More than 75 years of experience
- Present in 80 countries
- more than 6500 references in stock



## AFTER-SALES AND QUALITY SERVICE



## +33 (0)1 76 21 82 95

Monday to Friday 9 am-12:30 pm/2 pm-5 pm

#### **ORDER SPARE PARTS**

sp@airwell.com

#### **TECHNICAL SUPPORT**

sav@airwell.com

We want our customers to be satisfied with our services, which is why our teams constantly monitor our spare parts stock.

Our interactive voice server (IVR) has been redesigned in order to provide more efficient and effective customer service. Our responsiveness and professionalism aim for a benchmark level of service.

#### **ABOUT US**

#### A French brand regarded as the professional benchmark

A French expert and developer of HVAC solutions for the past 75 years, Airwell's mission has always been to create and cultivate well-being.

A vision of the future. Airwell was created in 1947 out of the crazy idea of bringing from United States innovative solutions that did not exist yet in Europe: air conditioning.

Today, innovation is more crucial to Airwell than ever, given our status as leaders in the creation of HVAC solutions. We apply a profoundly human approach to innovation, listening to our consumers, and like the family spirit that defines Airwell, is based on the common good, with due regard to everyone's expectations.

Optimize our energetic consumption, promoting solar energy to preserve our natural resources, reinventing consumer practices to limit our environmental footprint, cultivating home comfort... At Airwell, we are committed to these issues, for the well-being of all and for the environ-

"What was just an ambition for us has become our mission."

#### **OUR COMMITMENTS**

#### Service is our priority

- Design of unique solutions
- Our DNA: partnership
- Help in making your projects a success
- · Local and remote technical support

#### French Quality and Expertise

- A historic French brand
- Innovative and competitive solutions
- Wide range of products to adapt to every need

## OUR VALUES AND CORPORATE CULTURE

#### **INNOVATION • SERENITY • COMFORT LISTENING • COMMITMENT**

"Just feel well" sums up our corporate culture, based on lasting relationships for the common good, in which everyone is respected.

An extended family including employees, distributors, installers, maintenance technicians, partners and consumers.







#### **MODEL**

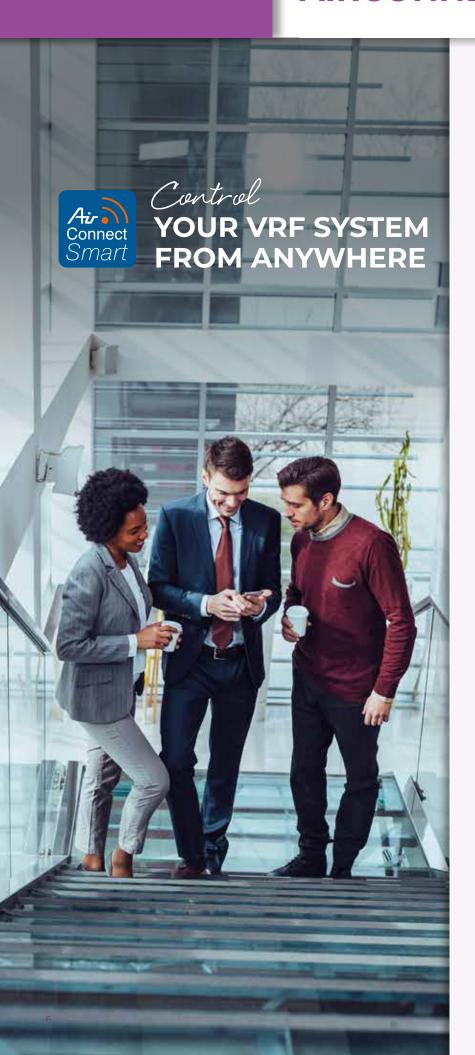
AIRCONNECT SMART APP



p.8 AIRCONNECT PRO APP



# **AIRCONNECT SMART**



The FlowLogic
VRF system can be remotely controlled by the intelligent
WiFi module and controlled by the AirConnect Smart application.

0

Control your Airwell VRF air conditioning system wherever you are, up to 4 VRF systems and 64 indoor units.

2

Pair all your indoor units at once thanks to Airwell WiFi Bus Control technology.

3

Multi-site management: quick and easy to use for managing several sites equipped with Airwell VRF from your smartphone.

4

Create your own regulation for greater comfort, maximum efficiency and energy savings with the automation and scenario platform.

5

Add a multitude of connected objects.

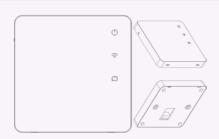
To download the application, it's simple: just scan the QR code.





#### **SMART WIFI MODULE:**

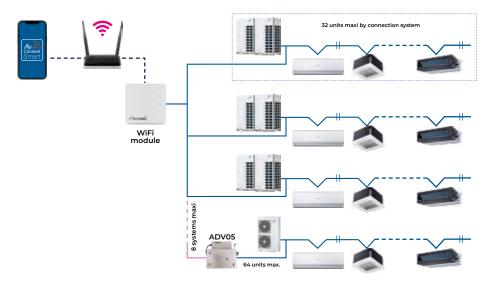
▶ Part number: 7ACEL1869



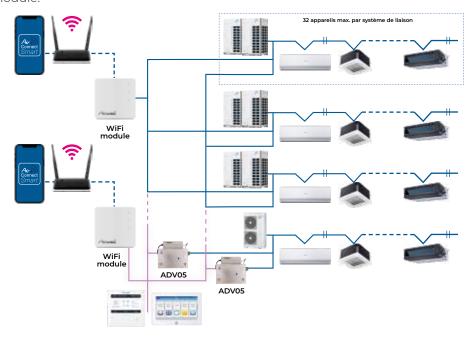
- ▶ Module dimension: 86x86x12 mm
- ► Compatible models: VVFA, VVTA, VVEA

### **INSTALLATION METHOD**

▶ Thanks to Airwell WiFi Bus Control, a single pairing to connect all your indoor units.



▶ The Airwell VRF can be associated with both the central controller (RWV06, RWV09) and the AirConnect Smart WiFi module.



# **AIRCONNECT PRO**



# Global solution THE CONTROL AND PREVENTIVE MAINTENANCE OF VRF INSTALLATIONS

accessible on smartphone, tablet\* or computer





# Simple data collection with the AirConnect Pro cloud box

Up to 2 VRF systems and 128 indoor units managed by one AirConnect Pro box.

#### **OPTIMAL THERMAL COMFORT**

Entrust your thermal comfort to Air-ConnectPro, in order to free you from technical constraints and operational hazards.

#### **HISTORY MANAGEMENT**

Access the complete operating history (fluidic and electrical) of each indoor and outdoor unit from the day of commissioning. Make comparisons between periods or between sites.

#### **VISUALIZATION OF YOUR VRF FLEET**

View the settings of all your VRF spread across a city, region, country or around the world.

#### **ALERT MANAGEMENT**

Be alerted to the slightest drift! Alerts, anomalies can be sent directly to your technicians depending on the level of technicality or their geographical proximity.

#### **PREVENTIVE MAINTENANCE**

Easily create your anticipation rules to prevent any problems or untimely shutdown of your systems.

#### **CREATION OF TECHNICAL DIAGNOSTICS**

Carry out your technical diagnostics in no time and offer a technical service of unparalleled quality and speed while optimizing the work of on-site technicians.



## AIRCONNECT PRO IS A COMPLETE SOLUTION THAT OFFERS 3 LEVELS OF SFRVICE:

- ► CONTROL APP: control of indoor units
- ▶ **SERVICE APP:** diagnostic and preventive maintenance
- ▶ MANAGEMENT APP: site management, energy metering and optimization

CONTROL APP (CONTROL OF INDOOR UNITS)	<ul> <li>Unique solution for remote control of indoor units</li> <li>Management of modes, setpoint temperatures, fan speed</li> <li>"Weekly schedule" programming without rule limitation</li> <li>Creation of control zones allowing energy savings</li> </ul>
SERVICE APP (DIAGNOSIS AND PREVENTIVE MAINTENANCE)	<ul> <li>The ONLY preventive remote maintenance solution on the market: Prevent a breakdown before it happens!</li> <li>Remote visualization of all the parameters of the installations</li> <li>VRF and diagnosis in one click</li> <li>Recording of all the data allowing a complete history of history of operation</li> <li>Management and follow-up of alerts to designated technicians</li> </ul>
MANAGEMENT APP (METERING AND ENERGY OPTIMIZATION) (IN DÉVELOPPENT)	<ul> <li>The most reliable and accurate energy metering solution on the market. Thanks to the Modbus MID meter, it allows the distribution of consumption per indoor unit according to its operating parameters.</li> <li>Division of the global consumption by indoor unit or by zone</li> <li>Energy audit of the installation allowing energy savings</li> <li>Comparison of consumption by system or by site in</li> </ul>

#### PRODUCT & SERVICE REFERENCES

reduce energy costs

order to optimize the operation of the machines and

	1 <sup>ST</sup> YEAR PACK	FROM THE 2 <sup>ND</sup> YEAR
	Cloud Box AirConnect Pro License of CONTROL APP without limitation of time. 1 year SERVICE APP license for the maintenance solution.	Tacit renewal of the license of SERVICE APP. In the event of termination of the SERVICE APP, the CONTROL APP application remains usable for life.
AIRCONNECT PRO CLOUD BOX	SO3199999	
LIFETIME CONTROL APP LICENSE PER CLOUD BOX	SO3299999	
SERVICE APP LICENSE PER SYSTEM & PER YEAR	SO30120xx	xx = system capacity





# COMMERCIAL & INDUSTRIAL Ranges

## THE VRF AIRWELL OFFER

A manufacturing concept built on experience and an international presence. Product designed to meet European energy efficiency prerogatives while being resistant to harsh climatic environments.

#### Airwell VRFs are 100% Inverter

The new VRF Inverter range exclusively uses the best japanese compressor brands and focusing on 3 technologies: the Scroll EVI, the Scroll and the Twin Rotary, thus offering a perfect ratio between reliability and energy efficiency.

All the refrigeration units of the Airwell VRFs have been strictly selected to guarantee flawless reliability and increased service life.

Among the most notable refrigeration components are the japanese compressors and the oversized «anti-liquid shock» bottle protecting it. An oil separator per compressor allowing a direct return of more than 95% of the oil expelled during discharge and a sub-cooler with an adjustable target during development.

In addition, each Airwell VRF is protected by a series of sensors allowing the correct operation and energy efficiency of the installation to be guaranteed at all

#### Airwell communication bus

Thanks to the disconnection of the indoor units, it allows the system to remain in operation, offering greater comfort to end customers during service and maintenance operations.

#### Silent mode

Silent mode allows installation in restricted urban areas.

#### **Anti-corrosion treatment**

Standard anti-corrosion treatment offering resistance to salt spray for more than 500 hours and reinforced anti-corrosion treatment on request to meet the most demanding constraints.

# THE VRF AIRWELL OFFER



	OUTDOOR UNIT	Г	REFRIGERANT TYPE	CAPACITY (HP)	COOLING CAPACITY (KW)	HEATING CAPACITY (KW)
p.13	VVFA - 2-PIPES - F	RONT DISCHAR	GE			
		VVFA-125R		4	12.10	14.20
		VVFA-150R		6	15.50	18.00
		VVFA-220R	R410A	8	22.60	22.60
		VVFA-280R		10	28.00	30.50
		VVFA-335R		12	31.50	31.50
p.16	VVTA - 2 PIPES - T	OP DISCHARGE	N			
		VVTA-250R		8	25.20	25.20
		VVTA-280R		10	28.00	28.00
	9	VVTA-335R		12	33.50	33.50
		VVTA-400R		14	40.00	40.00
	72 111	VVTA-450R	R410A	16	45.00	45.00
		VVTA-504R		18	50.40	50.40
		VVTA-560R		20	56.00	56.00
		VVTA-615R		22	61.50	61.50
		VVTA-680R		24	68.00	68.00
$\perp$		VVTA-735R		26	73.50	73.50
p.26	VVEA- 3 PIPES - TO	OP DISCHARGE	N <sub>E VI</sub>			
		VVEA-250R		8	22.40	22.40
	9	VVEA-280R		10	28.00	28.00
	== ==	VVEA-335R		12	33.50	33.50
		VVEA-400R	R410A	14	40.00	40.00
		VVEA-450R	KHIOA	16	45.00	45.00
		VVEA-504R		18	50.40	50.40
	2.5	VVEA-560R		20	56.00	56.00
$\perp$		VVEA-615R		22	61.50	61.50
p.36	WATER FLOWLOC	GIC				
	Avel	VVWO-220R		8	22.40	25.00
		VVWO-280R	R410A	70	28.00	31.50
	100	VVWO-335R		12	33.50	37.50



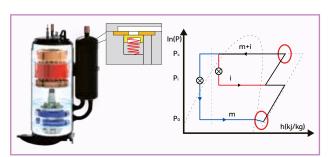
# **VVFA**

## Compact VRF Range

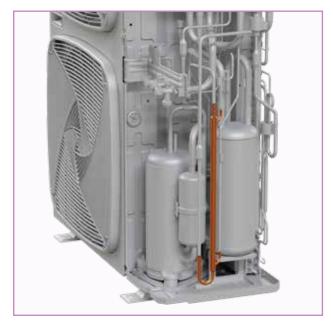
Our range of compact VRFs adapts perfectly to any type of installation, commercial, tertiary or residential. The small dimensions offered by this range make it possible to considerably reduce handling operations, guaranteeing better adaptability in terms of installation (see installation characteristics).

#### ► Twin rotary compressor

High efficiency compressor offering top performance with minimum vibration and reduced energy consumption.



#### ► Two-stage subcooler



#### **▶** DC Inverter fan motor



- **▶** Loading valve
- **▶** Eurovent certified



► Nsc up to 337% or SEER 8.5

#### **COMPATIBLE**



### **COMPATIBLE**







# **COMPATIBLE**



#### **COMPATIBLE**



#### + PRODUCT

- DC Inverter rotary compressor
- DC Inverter fan motor
- Integrated Human Machine Interface (HMI)
- Reduced dimension







RWV09 (optional, see configuration page 59)

#### **FEATURES**

#### **TECHNOLOGY**





#### INSTALLED FUNCTIONS









#### CERTIFICATION

 AIRWELL participates in the ECP programme for AC1. Check ongoing validity of certificate:

www.eurovent-certification.com



· All models are Eurovent certified, except VVFA080.

# 2-pipes - Front discharge system



#### THE **O** «SUSTAINABLE DEVELOPMENT»

> Low consumption and optimized regulation for greater energy savings.

#### THE **O** «USER»

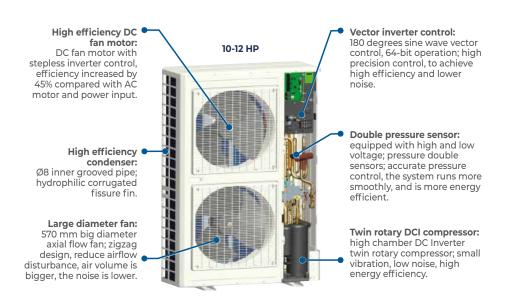
- > Mode locking.
- > Centralised management.

#### THE **O** «INSTALLER»

- > Up to 300 m of refrigeration network and 50 m of height difference.
- > Access to all parameters via the HMI (Human Machine Interface) for easier

#### THE **O** «TECHNOLOGY»

- Up to 16 indoor units, performance certified by Eurovent\* (8,10,12 HP).
- Airconnect Pro: remote maintenance and management option (see page 8).



### TECHNICAL DATA

MODEL			VVFA-125R- 01M22	VVFA-150R- 01M22	VVFA-150R- 01T32	VVFA-220R- 01T32	VVFA-280R- 01T32	VVFA-335R- 01T32		
Part number			7VF150004	7VF150005	7VF150006	7VF150007	7VF150008	7VF150009		
Phase			Single	phase		Three	phases			
Power		HP	4	6	6	8	10	12		
COOLING M	ODE									
Rated power	•	kW	12.10	15.50	15.50	22.60	28.00	31.50		
Rated power	input	kW	2.99	4.31	4.31	6.46	8.75	10.16		
EER			4.05	3.60	3.60	3.50	3.20	3.10		
SEER			6.82	6.45	6.45	8.50	8.20	7.70		
Seasonal ope	rating limits	%	269.8	255	255	337	325	305		
HEATING MO	ODE									
Rated power	*	kW	14.20	18.00	18.00	22.60	30.50	31.50		
Max. power		kW	-	-	-	25.00	32.00	35.00		
Rated power	input	kW	3.18	4.39	4.39	5.79	8.03	8.51		
COP			4.47	4.10	4.10	3.90	3.80	3.70		
SCOP*			3.92	3.8	3.8	5.00	4.80	4.70		
Seasonal ope	rating limits	%	153.8	149	149	197	189	185		
POWER SUF	PPLY									
Phase/Voltage	e/Frequency		1P/220-240	)V/50-60Hz		3P/380-415V/50-60Hz				
INSTALLATIO	ON									
Dimensions	Unit	mm		950x1340x370			1050x1636x400			
(WxHxD)	Shipping	mm		1023x1420x471			1150x1790x510			
Net weight/G	ross weight	kg		108/123			149/168			
	Type			Rotary			Twin Rotary DCI			
Compressor	Engine power	W	4130	4130	4060		6270			
	Number of compressors			1			1			
Airflow (HS)		m³/h		7200			10000			
Sound	Cooling mode	dB(A)	57	59	59	63	64	65		
pressure	Heating mode	dB(A)	57	59	59	65	66	67		
Refrigerant				R410A			R410A			
Charge		kg		4.00			5.10			
PIPE LINE										
Liquid pipe di	iameter	inches		3/8"		3/8"	3/8"	1/2"		
Suction pipe	diameter	inches		5/8"		3/4"	7/8"	1"1/8		
Max. length		m		300			300			
	equivalent/actual)	m		175/150			175/150			
units	etween indoor and oudoor	m		50		50				
	height between indoor units m 15 15									
Indoor/outdoo (min./max.)	or unit power ratio	%		50-130		50-130				
Maximum nu indoor units	mber of connectable	quantity	8	13	13	13 16 19				
OPERATING LIMITS										
Cooling mode	e (min./max.)	°C		-5/50			-5/48			
Heating mode	e (min./max.)	°C		-20/27			-20/27			

<sup>\*</sup> All the specifications are tested under nominal condition as per Eurovent conditions (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°C WB).

#### **ACCESSORIES**

ACCESSORY	PART NUMBER	REFERENCE	РНОТО	FUNCTION	COMMENT
Manifold pipe	7ACFHH001	TAU335	55	Refrigerant gathering	• 33,5 kW > Total indoor units power
(gas + liquid)	7ACFHH002	TAU506		Refrigerant gathering	• 33,5 kW ≤ Total indoor units power < 50,6 kW
Central controller gateway and ModBus/RTU	7ACELH027	ADV05		RWV06 and RWV08 adaptor and ModBus/RTU gateway	• See configuration page 61
Maintenance tool	7ACELH014	TD02		Working parameters monitoring and recording tool	
Smart WiFi module	7ACEL1869	-	Piranik.	Remote control by the smart WiFi module and controlled by the AirConnect Smart application	Module diimensions: 86x86x12 mm.

## L'OFFRE DE VRF AIRWELL







# Reversible - Continuous heating 2-pipes VRF range

The 2-pipes VRF range was redesigned with a new innovative structure integrating a service door and all the electronic components mounted on a hinge.

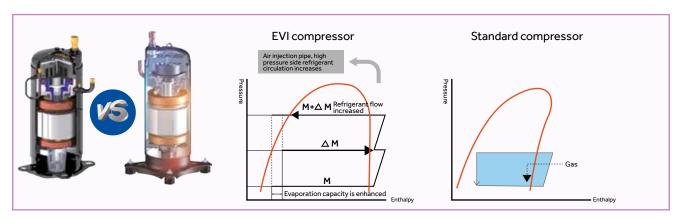
- ► A unit capacity of up to 73.5 kW that can be coupled up to 4 modules.
- ▶ A new **4-way exchanger**, for better heat exchange.





#### ► Innovative EVI compressor

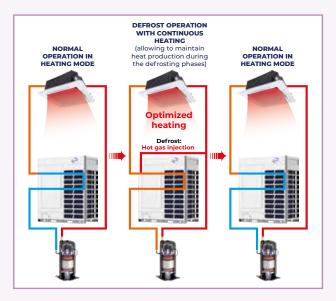
We have equipped this new range with an EVI (enhanced vapor injection) compressor to offer Airwell customers a unique experience. The unit incorporates a compressor with EVI technology which increases the flow of refrigerant by 15% and thus obtains a 30% improved efficiency in heating compared to traditional compressors. In addition, thanks to the valve incorporated in the EVI compressor, the efficiency of the system is increased by 5% with operation down to -27°C in heating and up to +52°C in cooling.



#### **▶** Continuous heating

The EVI compressor allows the production of heat without interruption during the defrosting phases.

The VVTA range uses intelligent defrosting technology, allowing heating production to be maintained even during defrosting phases. Indeed, an algorithm taking into account the pressure of the system, the temperature of the battery and influencing the variation of the fan motor allows us to offer this level of comfort by reducing the fluctuations of interior temperature.



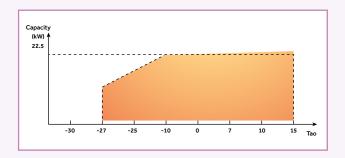
#### ► Modbus output included

No need for a gateway anymore to use a centralized controller or integrate the system with a BMS. An addressable and configurable Modbus output is directly available on the outdoor unit.



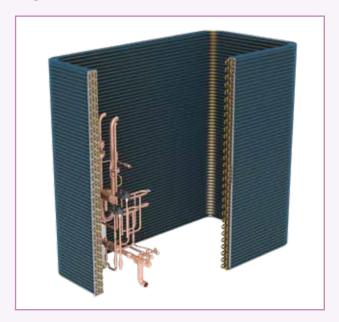
#### ▶ Improved heating capacity

At low temperature, compared to standard machines, the heating capacity increases by 10%. In the 8HP unit for example, the heating capacity is 100% at -10°C outdoor temperature.



#### ► A new 4-way heat exchanger

Improving heat transfer on the 4 sides of the condensing unit.







#### COMPATIBLE







#### + PRODUCT

- Capacity from 25 to 294 kW
- Combination of 4 outdoor units possible
- Continuous heating
- EVI Scroll compressor
- Modbus outlet





RWV06 optional, see configuration

RWV09 (optional, see configuration

#### **FEATURES**

#### **TECHNOLOGY**





#### INSTALLER FUNCTIONS









### CERTIFICATION

 AIRWELL participates in the ECP programme for AC1. Check ongoing validity of certificate:

www.eurovent-certification.com



## **VVTA**

# 2 pipes - Top discharge system







VVTA 250-450

VVTA 504-735

#### THE **O** «SUSTAINABLE DEVELOPMENT»

- > Low consumption and optimized regulation for greater energy savings.
- > Improved efficiency at very low and very high temperature (from -27°C to 52°C) thanks to the EVI.

#### THE **O** «USER»

- > Heating mode uninterrupted during the defrost phases.
- > Intuitive and efficient centralized management.
- > Large choice of indoor units.

#### THE **O** «INSTALLER»

- > Improved accessibility, thanks to the service door.
- > Up to 1000 m of refrigeration network and 110 m of height difference.
- > Modbus outlet for easy BMS integration.
- > Access to all operating parameters, thanks to the HMI (Human Machine Interface).

#### THE **O** «TECHNOLOGY»

- > Automatic oil balance, no more balance tube.
- > Reinforced anti-corrosion treatment.
- > Compatible with AirConnect Pro and AirConnect Smart.
- > 110 Pa available static pressure on outdoor fan(s).

#### **ACCESSORIES**

ACCESSORY	PART NUMBER	REF.	РНОТО	FUNCTION	COMMENT
Gather pipe kit for 2 outdoor groups	7ACFHH013	TBS20	E	Refrigerant gathering	• For 2 outdoor groups
Gather pipe kit for 3 outdoor groups	7ACFHH014	TBS30	1	Refrigerant gathering	• For 3 outdoor groups
Gather pipe kit for 4 outdoor groups	7ACFHH014 + 7ACFHH015	TBS30 + TAU2040	1	Refrigerant gathering	• For 4 outdoor groups
	7ACFHH001	TAU335		Refrigerant gathering	• 33.5 kW > Total IDU power
	7ACFHH002	TAU506		Refrigerant gathering	• 33.5 kW ≤ Total IDU power < 50.6 kW
Manifold pipe (gas + liquid)	7ACFHH003	TAU730	-	Refrigerant gathering	• 50.6 kW ≤ Total IDU power < 73 kW
	7ACFHH004	TAU1350	1	Refrigerant gathering	• 73 kW ≤ Total IDU power < 135 kW
	7ACFHH015	TAU2040		Refrigerant gathering	• 135kW ≤ Total IDU power
Maintenance tool	7ACELH014	TD02	E COOL	Working parameters monitoring and recording tool	
Smart WiFi module	7ACEL1869	-	Pirant	Remote control by the smart WiFi module and controlled by the AirConnect Smart application	• Module diimensions: 86x86x12 mm.

#### TECHNICAL DATA

MODEL			VVTA- 250R	VVTA- 280R	VVTA- 335R	VVTA- 400R	VVTA- 450R	VVTA- 504R	VVTA- 560R	VVTA- 615R	VVTA- 680R	VVTA- 735R
Part number			7VF150018	7VF150019	7VF150020	7VF150021	7VF150022	7VF150023	7VF150024	7VF150025	7VF150026	7VF150027
Phase							Three	ohases				
Power		HP	8	10	12	14	16	18	20	22	24	26
COOLING M	ODE											
Rated power'	•	kW	25.20	28.00	33.50	40.00	45.00	50.40	56.00	61.50	68.00	73.50
Rated power i	input	kW	6.24	7.37	9.31	11.94	13.24	15.70	16.62	18.30	21.94	24.75
Max. power in	put	kW	14.30	15.10	16.32	17.58	20.69	25.90	28.91	31.82	32.81	35.35
Rated current	:	А	10.53	12.44	15.71	20.16	22.34	26.51	28.05	30.90	31.42	35.87
Max. current		Α	23.81	25.14	27.17	29.27	34.50	40.30	46.30	51.91	54.12	58.86
EER			4.04	3.80	3.60	3.35	3.40	3.21	3.37	3.36	3.10	2.97
SEER			7.25	7.09	6.69	6.60	6.36	6.78	6.75	6.54	5.97	5.68
Seasonal oper	rating limits		287	281	265	261	251	268	267	259	236	224
HEATING MO	ODE											
Rated power	*	kW	25.20	28.00	33.50	40.00	45.00	50.40	56.00	61.50	68.00	73.50
Rated power i	input	kW	5.56	6.32	7.71	9.71	10.92	12.81	14.23	16.14	18.86	21.62
Max. power in	put	kW	11.69	12.19	12.69	16.10	19.56	21.93	24.70	25.69	30.40	32.45
Rated current		А	9.67	10.99	13.40	16.88	18.99	22.27	24.75	28.06	32.80	37.60
Max. current		А	19.47	20.30	21.13	26.81	32.57	36.51	41.13	42.78	50.62	54.03
СОР			4.53	4.43	4.35	4.12	4.12	3.93	3.93	3.81	3.61	3.40
SCOP			4.61	4.51	4.51	4.31	4.10	4.31	4.38	4.39	4.34	3.88
Seasonal oper	rating limits		182	177	177	169	161	170	172	172	170	152
POWER SUF	PPLY											
Phase/Voltage	e/Frequency		3P/380-415V/50-60Hz									
PERFORMAI	NCE											
Airflow (HS)		m³/h	11000	11000	12000	13500	13500	17000	17000	18000	18000	19000
Sound	Cooling mode	dB(A)	61	61	61	64	64	64	64	-	-	-
pressure	Heating mode	dB(A)	56	56	59	59	60	61	61	61	62	62
Sound power		dB(A)	81	82	88	88	88	88	88	88	90	90
INSTALLATIO		, ,										
	ensions (WxHxD)	mm			980x1690x75	0			1	410x1690x75	0	
	ensions (WxHxD)	mm			070x1858x85					515x1858x85		
Net weight/G		kg			255/280					385/410		
, , ,	Туре	3			Scroll DCI					Scroll DCI		
Compressor	Brand			Mi	tsubishi Elec	tric			Mit	subishi Elec	tric	
,	Number of compressors				1					2		
Refrigerant							R4	10A				
Charge		kg					1	0				
Liquid pipe di	ameter	inches	3/	8"		1/2"				5/8"		
Suction pipe	diameter	inches	3/4"	7/8"	1	1"	1"1/8			1"1/8		
Max. length		m					10	00				
Max. length (e	equivalent/actual)	m					260	/220				
Max. height b units (ODU do	etween indoor and oudoor own/up) (1)	m					110	/90				
Standard heig oudoor units	ght between indoor and (ODU down/up) (2)	m	m 50/40									
Max. height b	etween indoor units (3)	m			30							
Standard heig	ght between indoor units (4)	m					1	8				
External statio		Pa					וו	10				
Indoor/outdoor unit power ratio (min./max.) 50~130  Maximum number of connectable guartity 17 36 20 27 70 77 76 40												
maximum nu indoor units	mber of connectable	quantity	13	16	20	24	27	30	33	36	40	43
OPERATING	LIMITS											
Cooling mode	e (min./max.)	°C					-51	-52				
Heating mode	e (min./max.)	°C					-27	′~21				

<sup>(1)</sup> If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
(2) Standard design and production in the factory.
(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).

# Continuous heating 2-pipes

#### TECHNICAL DATA FOR TWO COMBINATIONS

MODEL			VVTA-800R	VVTA-850R	VVTA-900R	VVTA-954R	VVTA-1008R	VVTA-1064R	VVTA-1120R			
			VVTA-400R	VVTA-400R	VVTA-450R	VVTA-450R	VVTA-504R	VVTA-504R	VVTA-560R			
COMBINATI	IONS		7VF150021	7VF150021	7VF150022	7VF150022	7VF150023	7VF150023	7VF150024			
			VVTA-400R	VVTA-450R	VVTA-450R	VVTA-504R	VVTA-504R	VVTA-560R	VVTA-560R			
			7VF150021	7VF150022	7VF150022	7VF150023	7VF150023	7VF150024	7VF150024			
Phase						Three phases						
Power		HP	28	30	32	34	36	38	40			
COOLING M	IODE											
Rated power	*	kW	80.00	85.00	90.00	95.40	100.80	106.40	112.00			
Rated power	input	kW	23.88	25.18	26.47	28.94	31.40	32.32	33.23			
Max. power ir	nput	kW	35.16	38.27	41.38	46.59	51.80	54.81	57.82			
Rated current	t	Α	40.32	42.50	44.69	48.85	53.01	54.56	56.11			
Max. current		Α	58.54	69.00	80.60	92.60	103.82	108.24	117.72			
EER			3.35	3.38	3.40	3.30	3.21	3.29	3.37			
SEER			5.68	6.54	6.42	6.63	6.84	6.82	6.80			
Seasonal ope	rating limits		224	259	254	262	271	271 270 2				
HEATING M	ODE											
Rated power	*	kW	80.00	85.00	90.00	95.40	100.80	106.40	112.00			
Rated power		kW	19.42	20.63	21.84	23.73	25.62	27.04	28.47			
Max. power ir	•	kW	32.20	39.12	43.86	49.40	51.38	60.80	64.90			
Rated current	•	A	33.76	35.87	37.98	41.27	44.55	47.02	49.50			
Max. current	•	A	53.61	65.14	73.03	82.25	85.55	101.23	108.06			
COP		^	4.12	4.12	4.12	4.01	3.93	3.93	3.93			
SCOP			4.12	4.12	4.12	4.21	4.31	4.34	4.38			
	nation of line its											
Seasonal ope	-		169	165	161	165	169	171	172			
POWER SUF					_	_ /						
Phase/Voltag					3	P/380-415V/50-60	Hz					
PERFORMA	NCE											
Airflow (HS)		m³/h	27000	27000	27000	30500	34000	34000	34000			
Sound pressure	Cooling mode Heating mode	dB(A) dB(A)	62 62	62.5 62.5	63 63	63.5 63.5	64 64	64 64	64 64			
Sound power	level (HS)	dB(A)	91	91	91	91	91	91	91			
INSTALLATIO	ON											
	ensions (WxHxD)	mm	980x16	90x750 + 980x16	90x750	980x1690x750 +1410x1690x750	1410x16	590x750 + 1410x16	90x750			
Shipping dim	nensions (WxHxD)	mm	1070x18	1070x1858x850 + 1070x1858x850		1070x1858x850 +1515x1858x850	1515x18	358x850 + 1515x18	58x850			
Net weight/G	ross weight	kg	:	255/280 + 255/28	0	255/280 + 385/410		385/410 + 385/410	1			
	Type					Scroll DCI						
Compressor	Brand					Mitsubishi Electri	С					
	Number of compressors			2		3		4				
Refrigerant						R410A						
Charge		kg				20						
Liquid pipe d	iameter	inches	5/8"			3/	4"					
Suction pipe		inches	1"1/8		1"1/4			1"1/2				
Max. length		m	. 1,0		. 1/ 1	1000		. 1/2				
-	equivalent/actual)	m				260/220						
- ,	petween indoor and oudoor	m				110/90						
Standard heigh	ght between indoor and	m				50/40						
budoor units (ODO down/up) (2)		m				70						
-				30								
	. ,					18						
Indoor/outdo	external static pressure Pa andoor/outdoor unit power ratio					110 50~130						
(min./max.) Maximum nu indoor units	ımber of connectable	quantity	47	50	53	56	59	63	64			
OPERATING	LIMITS											
Cooling mode	e (min./max.)	°C				-5~52						
Heating mod	le (min./max.)	°C				-27~21						

<sup>(1)</sup> If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
(2) Standard design and production in the factory.
(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 20°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).

## TECHNICAL DATA FOR TWO COMBINATIONS

MODEL			VVTA-1175R	VVTA-1230R	VVTA-1295R	VVTA-1360R	VVTA-1415R	VVTA-1470R			
			VVTA-560R	VVTA-615R	VVTA-615R	VVTA-680R	VVTA-680R	VVTA-735R			
			7VF150024	7VF150025	7VF150025	7VF150026	7VF150026	7VF150027			
COMBINATI	ONS	'	VVTA-615R	VVTA-615R	VVTA-680R	VVTA-680R	VVTA-735R	VVTA-735R			
		ľ	7VF150025	7VF150025	7VF150026	7VF150026	7VF150027	7VF150027			
Phase					Three i	phases					
Power		HP	42	44	46	48	50	52			
COOLING M	ODE				.0	1.0	00	32			
Rated power		kW	117.50	123.00	129.50	136.00	141.50	147.00			
Rated power		kW	34.92	36.61	36.91	37.22	39.86	42.49			
Max. power in		kW	60.73	63.64	64.63	65.62	68.16	70.70			
Rated current		А	58.95	61.80	62.32	62.84	67.29	71.73			
Max. current	•	A	117.08	138.00	161.20	185.20	207.64	216.48			
EER		, ,	3.36	3.36	3.51	3.65	3.55	3.46			
SEER			6.69	6.59	6.76	6.97	6.87	6.78			
Seasonal ope	rating limits		265	261	267	276	272	268			
HEATING MO	-		200	201	207	276	212	200			
Rated power		kW	117.50	123.00	129.50	136.00	141.50	147.00			
		kW		32.27	35.00			43.25			
Rated power in		kW	30.37		35.00 87.72	37.73 98.80	40.49				
Max. power in	•		64.40	78.24			102.77	121.60			
Rated current	Ţ.	A	52.81	56.12	60.86	65.60	70.40	75.20			
Max. current		А	107.23	130.28	146.05	164.50	171.11	202.46			
COP			3.86	3.81	3.69	3.60	3.49	3.39			
SCOP			4.38	4.39	4.36	4.34	4.08	3.88			
Seasonal ope	-		172	173	171	170	160	152			
POWER SUF											
Phase/Voltag					3P/380-415	5V/50-60Hz					
PERFORMA	NCE										
Airflow (HS)		m³/h	35000	36000	36000	36000	37000	38000			
Sound	Cooling mode	dB(A)	64	64	64.5	65	65	65			
pressure	Heating mode	dB(A)	64	64	64.5	65	65	65			
Sound power	level (HS)	dB(A)	92	93	93	93	93	93			
INSTALLATIO	NC										
External dime	ensions (WxHxD)	mm			1410x1690x750 -	+ 1410x1690x750					
Shipping dim	ensions (WxHxD)	mm	1515x1858x850 + 1515x1858x850								
Net weight/G	ross weight	kg			385/410 -	+ 385/410					
	Туре				Scrol	II DCI					
Compressor	Brand				Mitsubish	ni Electric					
	Number of compressors				4	4					
Refrigerant					R4	10A					
Charge		kg			2	0					
Liquid pipe di	iameter	inches			3/	4"					
Suction pipe	diameter	inches			1"1	1/2					
Max. length		m			10	00					
Max. length (e	equivalent/actual)	m			260,	/220					
Max. height b units (ODU do	netween indoor and oudoor own/up) (1)	m			110,	/90					
	ght between indoor and (ODU down/up) (2)	m			50,	/40					
Max. height b	etween indoor units (3)	m	30								
Standard heig	ght between indoor units (4)	m	18								
External station	c pressure	Pa	110								
Indoor/outdoo (min./max.)	or unit power ratio	%	50~130								
Maximum nu indoor units	mber of connectable	quantity	64								
OPERATING	LIMITS										
Cooling mode	e (min./max.)	°C			-5^	-52					
Heating mod	e (min./max.)	°C			-27	′~21					

<sup>(1)</sup> If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
(2) Standard design and production in the factory.
(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).

# Continuous heating 2-pipes

### TECHNICAL DATA FOR THREE COMBINATIONS

MODEL			VVTA-1512R	VVTA-1568R	VVTA-1624R	VVTA-1680R	VVTA-1735R	VVTA-1790R	VVTA-1845F		
			VVTA-504R	VVTA-504R	VVTA-504R	VVTA-560R	VVTA-615R	VVTA-615R	VVTA-615R		
			7VF150023	7VF150023	7VF150023	7VF150024	7VF150025	7VF150025	7VF150025		
COMBINATI	ONS		VVTA-504R	VVTA-504R	VVTA-560R	VVTA-560R	VVTA-560R	VVTA-615R	VVTA-615R		
			7VF150023	7VF150023	7VF150024	7VF150024	7VF150024	7VF150025	7VF150025		
			VVTA-504R	VVTA-560R	VVTA-560R	VVTA-560R	VVTA-560R	VVTA-560R	VVTA-615R		
			7VF150023	7VF150024	7VF150024	7VF150024	7VF150024	7VF150024	7VF150025		
Phase						Three phases					
Power		HP	54	56	58	60	62	64	66		
COOLING M	ODE										
Rated power	*	kW	151.20	156.80	162.40	168.00	173.50	179.00	184.50		
Rated power	input	kW	47.10	48.02	48.94	49.85	51.54	53.22	54.91		
Max. power ir	nput	kW	77.70	80.71	83.72	86.73	89.64	92.55	95.46		
Rated current	t	Α	79.52	81.07	82.61	84.16	87.01	89.85	92.70		
Max. current		Α	235.43	234.17	276.00	322.40	370.40	415.28	432.96		
EER			3.21	3.27	3.32	3.37	3.37	3.36	3.36		
SEER			6.85	6.84	6.83	6.81	6.74	6.67	6.60		
Seasonal ope	rating limits		271	271	270	269	267	264	261		
HEATING M	ODE										
Rated power	*	kW	151.20	156.80	162.40	168.00	173.50	179.00	184.50		
Rated power	input	kW	38.43	39.85	41.27	42.70	44.60	46.51	48.41		
Max. power ir		kW	129.80	128.80	156.48	175.44	197.60	205.54	243.20		
Rated current	•	Α	66.82	69.30	71.77	74.25	77.56	80.87	84.18		
Max. current		Α	216.12	214.45	260.56	292.11	329.00	342.22	404.93		
COP			3.93	3.93	3.93	3.93	3.88	3.84	3.81		
SCOP			4.31	4.33	4.36	4.38	4.38	4.39	4.39		
Seasonal ope	rating limits		169	170	171	172	172	172	173		
POWER SUF	-		103	170	171	172	172	172	173		
Phase/Voltag					30	P/380-415V/50-60	Н				
PERFORMA					J.	7500 415 1750 00	1 12				
Airflow (HS)	IVEE	m³/h	51000	51000	51000	51000	52000	53000	54000		
. ,	Cooling mode	dB(A)	65.8	65.8	65.8	65.8	65.8	65.8	65.8		
Sound pressure	Heating mode	dB(A)	65.8	65.8	65.8	65.8	65.8	65.8	65.8		
Sound power	-		93	93	93	93	93.5	94	95		
INSTALLATION INSTALLATION	, ,	dB(A)	93	93	93	93	93.3	54	93		
	ensions (WxHxD)	mm	1410x1690x750 + 1410x1690x750 + 1410x1690x750								
	, ,					+ 1515x1858x850 -					
	nensions (WxHxD)	mm									
Net weight/G	-	kg			385/4	410 + 385/410 + 38	55/410				
C	Type					Scroll DCI	_				
Compressor	Brand				Γ	Mitsubishi Electri	С				
	Number of compressors					6					
Refrigerant						R410A					
Charge	·	kg				30					
Liquid pipe d		inches	277	1/0		3/4"	3115/0				
Suction pipe	diameter	inches	I"	1/2			1"5/8				
Max. length		m				1000					
- ,	equivalent/actual)	m				260/220					
units (ODU do	. 17 (7	m				110/90					
oudoor units	ght between indoor and (ODU down/up) (2)	m				50/40					
-	petween indoor units (3)	m				30					
	ght between indoor units (4)	m				18					
	ternal static pressure Pa					110					
Indoor/outdo (min./max.)	or unit power ratio	%	50~130								
Maximum nu indoor units	imber of connectable	quantity	y 64								
OPERATING	LIMITS										
Cooling mode	e (min./max.)	°C				-5~52					
Heating mod	e (min./max.)	°C				-27~21					

<sup>(1)</sup> If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
(2) Standard design and production in the factory.
(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).

## TECHNICAL DATA FOR THREE COMBINATIONS

MODEL			VVTA-1910R	VVTA-19750R	VVTA-2040R	VVTA-2095R	VVTA-2150R	VVTA-2205R			
			VVTA-615R	VVTA-615R	VVTA-680R	VVTA-735R	VVTA-735R	VVTA-735R			
			7VF150025	7VF150025	7VF150026	7VF150027	7VF150027	7VF150027			
			VVTA-615R	VVTA-680R	VVTA-680R	VVTA-680R	VVTA-735R	VVTA-735R			
COMBINATION	ONS		7VF150025	7VF150026	7VF150026	7VF150026	7VF150027	7VF150027			
			VVTA-680R	VVTA-680R	VVTA-680R	VVTA-680R	VVTA-680R	VVTA-735R			
			7VF150026	7VF150026	7VF150026	7VF150026	7VF150026	7VF150027			
Dhasa			/VF150026	/VF150026			/VF150026	/VF15002/			
Phase		LID	60	70	Three p		T/C	70			
Power	0.0.5	HP	68	70	72	74	76	78			
COOLING Me		kW	191.00	197.50	204.00	209.50	215.00	220.50			
Rated power i		kW	55.22	55.53	55.83	58.47	61.10	63.74			
Max. power in	·	kW	96.45	97.44	98.43	100.97	103.51	106.05			
Rated current	•	A	93.22	93.74	94.26	98.71	103.31	107.60			
Max. current		A	470.86	468.33	552.00	644.80	740.80	830.56			
EER		А	3.46	3.56	3.65	3.58	3.52	3.46			
SEER	unation or limpian		6.80	6.86	6.98	6.92	6.85	6.79			
Seasonal oper	-		269	271	276	274	271	269			
HEATING MC	•	kW	107.00	107.50	204.00	200 50	215.00	220 50			
Rated power*			191.00	197.50		209.50	215.00	220.50			
Rated power i	•	kW	51.14	53.86	56.59	59.35	62.11	64.87			
Max. power in		kW	259.60	257.60	312.96	350.88	395.20	411.07			
Rated current		A	88.92	93.66	98.40	103.20	108.00	112.80			
Max. current		А	432.23	428.90	521.12	584.22	658.01	684.44			
COP			3.73	3.66	3.60	3.52	3.46	3.39			
SCOP			4.37	4.35	4.34	4.16	4.01	3.88			
Seasonal oper	-		172	171	170	164	157	152			
POWER SUP											
Phase/Voltage					3P/380-415	5V/50-60Hz					
PERFORMAN	NCE	,									
Airflow (HS)		m³/h	54000	54000	54000	55000	56000	57000			
Sound	Cooling mode	dB(A)	66	66.5	66.8	66.8	66.8	66.8			
pressure	Heating mode	dB(A)	66	66.5	66.8	66.8	66.8	66.8			
Sound power	, ,	dB(A)	95	95	95	95	95	95			
INSTALLATIO											
	ensions (WxHxD)	mm			x1690x750 + 1410x16						
	ensions (WxHxD)	mm		1515	x1858x850 + 1515x18		(850				
Net weight/G	-	kg			385/410 + 385,						
	Туре				Scrol	. –					
Compressor	Brand				Mitsubish						
	Number of compressors					5					
Refrigerant					R41						
Charge		kg			3						
Liquid pipe di		inches			7/						
Suction pipe of	diameter	inches			1"3						
Max. length		m			100						
- '	equivalent/actual)	m			260/	/220					
units (ODU do	. , . ,	m			110,	/90					
oudoor units	ght between indoor and (ODU down/up) (2)	m			50/						
	etween indoor units (3)	m			3						
	ght between indoor units (4)				18						
	c pressure or unit power ratio	Pa %			11 50~						
	mber of connectable	quantity									
indoor units OPERATING	LIMITS	-,			0						
Cooling mode	e (min./max.)	°C			-5^	-52					
Heating mode	e (min./max.)	°C			-27	~21					

<sup>(1)</sup> If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
(2) Standard design and production in the factory.
(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).



#### TECHNICAL DATA FOR FOUR COMBINATIONS

MODEL			VVTA-2240R	VVTA-2295R	VVTA-2350R	VVTA-2405R	VVTA-2460R	VVTA-2525R	VVTA-2590R		
			VVTA-560R	VVTA-560R	VVTA-560R	VVTA-560R	VVTA-615R	VVTA-680R	VVTA-680R		
			7VF150024	7VF150024	7VF150024	7VF150024	7VF150025	7VF150026	7VF150026		
			VVTA-560R	VVTA-560R	VVTA-560R	VVTA-615R	VVTA-615R	VVTA-615R	VVTA-680R		
			7VF150024	7VF150024	7VF150024	7VF150025	7VF150025	7VF150025	7VF150026		
COMBINATI	ONS		VVTA-560R	VVTA-560R	VVTA-615R	VVTA-615R	VVTA-615R	VVTA-615R	VVTA-615R		
			7VF150024	7VF150024	7VF150025	7VF150025	7VF150025	7VF150025	7VF150025		
			7VF150024	7VF150025	7VF150025	7VF150025	7VF150025	7VF150025	7VF150025		
Phase			7VF150024	/VF150025	/VF150025	Three phases	/VF150025	/VF150025	/VFI50025		
Power		HP	80	82	84	86	88	90	92		
COOLING M	ODE	THE	00	02	0-1	00	00	50	32		
Rated power		kW	224.00	229.50	235.00	240.50	246.00	252.50	259.00		
Rated power		kW	66.47	68.16	69.84	71.53	73.21	73.52	73.83		
Max. power ir		kW	115.64	118.55	121.46	124.37	127.28	128.27	129.26		
Rated curren	•	A		112.21 115.06 117.91 120.75 123.60 124							
Max. current		A	865.92	941.72	936.66	1104.00	1289.60	1481.60	124.64 1661.12		
EER		A	3.37	3.37	3.36	3.36	3.36	3.43	3.51		
SEER			6.82	6.76	6.71	6.65	6.61	6.70	6.80		
Seasonal ope	rating limits		270 267 265 263 261 265						269		
HEATING M	-		2/0	20/	200	203	201	200	209		
Rated power		kW	224.00	229.50	235.00	240.50	246.00	252.50	259.00		
Rated power		kW	56.93	58.84	60.74	62.65	64.55	67.28	70.00		
Max. power in	'	kW	486.40	519.20	515.20	625.92	701.76	790.40	822.14		
Rated curren	•	A	98.99	102.31	105.62	108.93	112.24	116.98	121.72		
Max. current	t	A	809.86	864.47	857.81	1042.24	1168.43	1316.02	1368.87		
		А									
COP			3.93	3.90	3.86	3.83	3.81	3.75	3.69		
SCOP			4.38	4.38	4.38	4.39	4.39	4.38	4.36		
Seasonal ope	0		172	172	172	173	173	172	171		
POWER SUI					7.	2/200 (25) (/50 50					
Phase/Voltag					31	P/380-415V/50-60	Hz				
PERFORMA	NCE	7/1	50000	50000	50000	77000	50000	50000	50000		
Airflow (HS)		m³/h	68000	69000	70000	71000	72000	72000	72000		
Sound	Cooling mode	dB(A)	67	67	67	67	67	67.5	67.5		
pressure	Heating mode	dB(A)	67	67	67	67	67	67.5	67.5		
Sound power	, ,	dB(A)	94	95	95	96	96	96	96		
INSTALLATIO				1/10 10			1/10 10				
	ensions (WxHxD)	mm				590x750 + 1410x16					
	nensions (WxHxD)	mm		1515x18		358x850 + 1515x18		58x850			
Net weight/G	-	kg			385/410 +	385/410 + 385/410	) + 385/410				
	Type					Scroll DCI					
Compressor	Brand					Mitsubishi Electri	С				
	Number of compressors					8					
Refrigerant						R410A					
Charge		kg		m/- "		40					
Liquid pipe d		inches		7/8"							
Suction pipe	diameter	inches		1"3/4			2	2"			
Max. length		m				1000					
- ,	equivalent/actual)	m				260/220					
units (ODU d		m				110/90					
oudoor units	ght between indoor and (ODU down/up) (2)	m				50/40					
Ü	etween indoor units (3)	m				30					
	ght between indoor units (4)					18					
	c pressure or unit power ratio	Pa %	110 50~130								
	ımber of connectable	quantity									
indoor units OPERATING	LIMITS	7				3.					
Cooling mod	e (min./max.)	°C				-5~52					
Heating mod	e (min./max.)	°C				-27~21					

<sup>(1)</sup> If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.

(2) Standard design and production in the factory.

(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.

(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 20°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).

## TECHNICAL DATA FOR FOUR COMBINATIONS

MODEL			VVTA-2655R	VVTA-2720R	VVTA-2775R	VVTA-2830R	VVTA-2885R	VVTA-2940R			
			VVTA-680R	VVTA-680R	VVTA-735R	VVTA-735R	VVTA-735R	VVTA-735R			
			7VF150026	7VF150026	7VF150027	7VF150027	7VF150027	7VF150027			
			VVTA-680R	VVTA-680R	VVTA-680R	VVTA-735R	VVTA-735R	VVTA-735R			
			7VF150026	7VF150026	7VF150026	7VF150027	7VF150027	7VF150027			
COMBINATIONS											
			VVTA-680R	VVTA-680R	VVTA-680R	VVTA-680R	VVTA-735R	VVTA-735R			
			7VF150026 VVTA-615R	7VF150026	7VF150026	7VF150026	7VF150027	7VF150027			
				VVTA-680R	VVTA-680R	VVTA-680R	VVTA-680R	VVTA-735R			
			7VF150025	7VF150026	7VF150026	7VF150026	7VF150026	7VF150027			
Phase						phases					
Power		HP	94	96	98	100	102	104			
COOLING M	ODE										
Rated power	*	kW	265.50	272.00	277.50	283.00	288.50	294.00			
Rated power	input	kW	74.14	74.44	77.08	79.71	82.35	84.98			
Max. power ir	nput	kW	130.25	131.24	133.78	136.32	138.86	141.40			
Rated curren	t	Α	125.16	125.68	130.13	134.57	139.02	143.47			
Max. current		А	1731.84	1883.45	1873.33	2208.00	2579.20	2963.20			
EER			3.58	3.65	3.60	3.55	3.50	3.46			
SEER			6.90	6.99	6.94	6.89	6.84	6.80			
Seasonal ope	rating limits		273	277	275	273	271	269			
HEATING M			213	211	210	275	271	203			
Rated power		kW	265.50	272.00	277.50	283.00	288.50	294.00			
•		kW	72.73	75.45	78.21	283.00 80.97	<b>288.50</b> 83.73	86.50			
Rated power	'										
Max. power ir	•	kW	972.80	1038.40	1030.40	1251.84	1403.52	1580.80			
Rated curren	t	А	126.46	131.20	136.00	140.80	145.60	150.40			
Max. current		Α	1619.71	1728.94	1715.62	2084.48	2336.86	2632.03			
COP			3.65	3.60	3.54	3.49	3.44	3.39			
SCOP			4.35	4.34	4.20	4.08	3.98	3.88			
Seasonal ope	rating limits		171	170	165	160	156	152			
POWER SUF	PPLY										
Phase/Voltag	e/Frequency				3P/380-415	5V/50-60Hz					
PERFORMA	NCE										
Airflow (HS)		m³/h	72000	72000	73000	74000	75000	76000			
Sound	Cooling mode	dB(A)	68	68	68	68	68	68			
pressure	Heating mode	dB(A)	68	68	68	68	68	68			
Sound power	-	dB(A)	96	96	96	96	96	96			
	, ,	UD(A)	50	50	50	50	50	50			
INSTALLATION				1/10/1000/7	FO : 1/10:1000:7F0	. 1/10-1000-750 . 1	(10, 1000, 750				
	ensions (WxHxD)	mm			50 + 1410x1690x750						
	nensions (WxHxD)	mm	1485x1858x850 + 1485x1858x850 + 1485x1858x850 + 1485x1858x850								
Net weight/G		kg	385/410 + 385/410 + 385/410 + 385/410								
	Туре					II DCI					
Compressor	Brand				Mitsubisl	ni Electric					
	Number of compressors				{	8					
Refrigerant					R4	10A					
Charge		kg			4	O+0					
Liquid pipe d	iameter	inches			1	"					
Suction pipe		inches	2	2"		2"	1/4				
Max. length		m			10	00					
-	equivalent/actual)	m				/220					
	etween indoor and oudoor	m				/90					
Standard hei	ght between indoor and (ODU down/up) (2)	m			50,	/40					
Max. height between indoor units (3)		m			7	60					
						8					
3		Pa				0					
	or unit power ratio	% %				-130					
,	mber of connectable	quantity			6	54					
	LIMITC										
OPERATING		00			-						
Cooling mod	,	°C				~52					
Heating mod	e (min./max.)	-(			-21	7~21					

<sup>(1)</sup> If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
(2) Standard design and production in the factory.
(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).

## THE VRF AIRWELL OFFER



## **VVEA**

# 3-pipes energy recovery VRF range



- ▶ New range, new structure, new selection boxes.
- ➤ Just like the version of our VVTA range, the new VVEA 3-tube energy recovery VRF features the new structure of the range, as well as the **4-way heat exchanger** for a performance always at the highest level.
- ➤ Offering a wide range of capacity with monomodules with a capacity of 61.5 kW and a possible coupling of 4 outdoor units, the new VVEA will meet all hotel, office and tertiary application needs.











Commerces

Hôtels

Bureaux

#### ► Modbus output included

No need for a gateway anymore to use a centralized controller or integrate the system with a BMS. An addressable and configurable Modbus output is directly available on the outdoor unit.



#### **▶** New selection boxes

They incorporate electronic expansion valves replacing the old slide valves for much quieter operation and regulation perfectly suited to the needs of the connected indoor units.

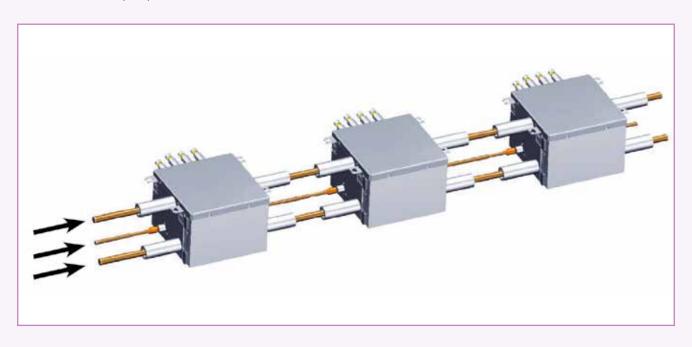
In addition, the new selection boxes are equipped with 3 additional tubes at the output, allowing it to be put in series for unprecedented modularity. This is valid for boxes with 4 outlets.



- ► Reduced dimensions.
- ▶ Electronic expansion valves for each refrigeration line.

MODEL	PART NUMBER	MAXIMUM CONNECTABLE CAPACITY (kW)	POWER SUPPLY	MAXIMUM NUMBER OF CONNECTABLE INDOOR UNITS (same operation mode)	DIMENSIONS (mm)	
VVEA HR 112 KIT	7ACELH028	< 11.2	1P/220-240V/50-60Hz	5	388x200x277	
VVEA HR 180 KIT	7ACELH029	< 18	1P/220-240V/50-60Hz	8	388x200x277	
VVEA HR 280 KIT	7ACELH030	< 28	1P/220-240V/50-60Hz	8	388x200x277	
	7ACELH031	< 45	1P/220-240V/50-60Hz	20	405x300x421	
VVEA HR 450 KIT	Total for	4 outlets	Total b	Total by outlet		
(4 outlets)	Total capacity of indoor units	Quantity of indoor units	Total capacity of indoor units	Quantity of indoor units		
	≤ 45 kW	≤ 20	≤ 11,2 kW	≤ 5		

The limit of the input power of a series is 71 kW maximum\*.







#### **COMPATIBLE**







#### + PRODUCT

- Capacity from 22.4 to 246 kW
- Combination of 4 outdoor units possible
- New selection boxes
- New 4-way heat exchanger
- Modbus outlet







RWV09 (optional, see configuration page 59)

#### **FEATURES**

#### **TECHNOLOGY**





#### INSTALLER FUNCTIONS







#### **CERTIFICATION**

 AIRWELL participates in the ECP programme for AC1. Check ongoing validity of certificate: www.eurovent-certification.com



## **VVEA**

# 3-pipes with heat recovery







VVEA 250-450

VVEA 504-735

#### THE **O** «SUSTAINABLE DEVELOPMENT»

> Heat recovery between units, for better energy efficiency.

#### THE **O** «USER»

- > Simultaneous operating in heating and cooling modes.
- > New even quieter selection box, thanks to their electronic expansion valve.

#### THE **O** «INSTALLER»

- > New improved accessibility, thanks to the service door.
- > Up to 1000 m of refrigeration network and 110 m of height difference.
- > Modbus outlet for easy BMS integration.
- > Access to all operating parameters, thanks to the HMI (Human Machine Interface).

#### THE **①** «TECHNOLOGY»

- > New 4-way selection boxes in series with reversible orientation.
- > Automatic oil balance, no need for a balance tube.
- > Reinforced anti-corrosion treatment.
- > Compatible with AirConnect Pro and AirConnect Smart.

#### ACCESSORIES

ACCESSORY	PART NUMBER	REF.	РНОТО	FUNCTION	COMMENT
Gather pipe kit for 2 outdoor groups	7ACELH041	TBS20HR	F	• Refrigerant gathering	• For 2 outdoor groups
Gather pipe kit for 3 outdoor groups	7ACELH042	TBS30HR	1	• Refrigerant gathering	• For 3 outdoor groups
Gather pipe kit for 4 outdoor groups	7ACELH043	TBS40HR	1	Refrigerant gathering	• For 4 outdoor groups
	7ACFHH007	TAU335HR		Refrigerant gathering	• 33.5 kW > Total IDU power
	7ACFHH008	TAU506HR		Refrigerant gathering	• 33.5 kW ≤ Total IDU power < 50.6 kW
Manifold pipe (gas + liquid)	7ACFHH009	TAU730HR	-5	Refrigerant gathering	• 50.6 kW ≤ Total IDU power < 73 kW
	7ACFHH010	TAU1350HR	- 1	Refrigerant gathering	• 73 kW ≤ Total IDU power < 135 kW
	7ACELH044	TAU2040HR		Refrigerant gathering	• 135kW ≤ Total IDU power
Maintenance tool	7ACELH014	TD02	100 m	Working parameters monitoring and recording tool	
Smart WiFi module	7ACEL1869	-	Mount	Remote control by the smart WiFi module and controlled by the AirConnect Smart application	• Module diimensions: 86x86x12 mm.

#### TECHNICAL DATA

MODEL			VVEA- 250R	VVEA- 280R	VVEA- 335R	VVEA- 400R	VVEA- 450R	VVEA- 504R	VVEA- 560R	VVEA- 615R
Part number			7VF150010	7VF150011	7VF150012	7VF150013	7VF150014	7VF150015	7VF150016	7VF150017
Phase						Three	phases			
Power		HP	8	10	12	14	16	18	20	22
COOLING M	ODE									
Rated power	*	kW	22.40	28.00	33.50	40.00	45.00	50.40	56.00	61.50
Rated power	input	kW	5.63	7.67	9.57	12.31	14.06	16.13	17.23	20.00
Max. power in	put	kW	12.80	13.80	18.20	19.20	25.10	28.50	32.00	33.00
Rated current	t	А	9.29	12.67	15.81	20.33	23.22	26.64	28.46	33.03
Max. current		А	21.14	22.79	30.06	31.71	41.45	47.07	52.85	54.50
EER			3.98	3.65	3.50	3.25	3.20	3.12	3.25	3.08
SEER			7.05	6.68	6.58	6.37	6.86	6.48	5.90	5.74
Seasonal ope	rating limits		279	264	260	252	271	256	233	227
HEATING MO	ODE									
Rated power	*	kW	22.40	28.00	33.50	40.00	45.00	50.40	56.00	61.50
Rated power	input	kW	5.15	6.67	8.38	10.53	11.39	13.70	15.78	17.91
Max. power in		kW	11.50	12.50	17.40	18.40	22.70	25.50	29.40	30.40
Rated current		А	8.50	11.01	13.83	17.38	18.81	22.62	26.05	29.58
Max. current		А	18.99	20.64	28.74	30.39	37.49	42.11	48.55	50.21
COP			4.35	4.20	4.00	3.80	3.95	3.68	3.55	3.43
SCOP			4.02	3.94	4.08	3.86	4.21	3.99	3.93	3.76
Seasonal ope	rating limits		158	155	160	151	165	157	154	147
POWER SUF	-					12.7				
Phase/Voltage						3P/380-41	5V/50-60Hz			
PERFORMAI						31/300 11	34/30 00112			
Airflow (HS)	NCL	m³/h	12000	12000	13500	13500	17000	17000	19000	19000
Sound pressu	uro (HS)	dB(A)	57.00	58.00	60.00	61.00	62.00	63.00	63.00	64.00
INSTALLATION IN THE STATE OF TH	, ,	GD(A)	37.00	30.00	00.00	01.00	02.00	05.00	05.00	04.00
	ensions (WxHxD)	mm		980v16	590x750			1410v16	590v750	
	ensions (WxHxD)	mm	980x1690x750 1410x1690x750 1070x1858x850 1515x1858x850							
Net weight/G		kg	246/271 257/282			766	/395		/404	
Net Weight/O		Ng	240	246/271 257/282 36 Scroll DCI			,,333	Scroll DCI	404	
Compressor	Type Brand			Α.	Aitsubishi Electi	ric		h	Mitsubishi Electr	ic
Compressor					nitsubisi ii Electi	IC .				IC .
Defricerent	Number of compressors				1	D/	10A		2	
Refrigerant		lea								
Charge		kg	7	/8"		1/2"	0		5/8"	
Liquid pipe di		inches	3/4"					7.77		
Suction pipe		inches		7/8"	1				1/8	
	diameter haut	inches	5,	/4"	1//	/8"	0.0		I"	
Max. length	· 1 ./ . B	m					00			
	equivalent/actual) etween indoor and oudoor	m m					/220 )/90			
Standard heigh	ght between indoor and	m				50	/40			
oudoor units (ODU down/up) (2)  Max. height between indoor units (3)  m					3	30				
Standard height between indoor units (4) m					1	8				
External static pressure Pa					1	10				
Indoor/outdoo (min./max.)	or unit power ratio	%				50/	~130			
Maximum nu indoor units	mber of connectable	quantity	13	16	20	24	27	30	33	36
OPERATING	LIMITS									
Cooling mode	e (min./max.)	°C				-5	~50			
Heating mode	e (min./max.)	°C				-23	3~21			

<sup>(1)</sup> If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.

<sup>(2)</sup> Standard design and production in the factory.

(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.

(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).

#### TECHNICAL DATA FOR TWO COMBINATIONS

MODEL			VVEA-670R VVEA-335R	VVEA-735R VVEA-335R	VVEA-800R VVEA-400R	VVEA-850R VVEA-400R			
			7VF150012	7VF150012	7VF150013	7VF150013			
COMBINATI	ONS		VVEA-335R	VVEA-400R	VVEA-400R	VVEA-450R			
			7VF150012	7VF150013	7VF150013	7VF150014			
Phase					phases				
Power		HP	24	26	28	30			
COOLING M	ODE								
Rated power		kW	67.00	73.50	80.00	85.00			
Rated power		kW	19.14	21.88	24.62	26.37			
Max. power ir		kW	36.40	37.40	38.40	44.30			
Rated current		А	31.61	36.13	40.65	43.55			
Max. current		А	60.11	61.77	63.42	73.16			
EER			3.50	3.36	3.25	3.22			
SEER			6.58	6.46	6.37	6.61			
Seasonal ope	rating limits		260	255	252	261			
HEATING M	ODE								
Rated power	*	kW	67.00	73.50	80.00	85.00			
Rated power		kW	16.75	18.90	21.05	21.92			
Max. power ir		kW	34.80	35.80	36.80	41.10			
Rated current	t	А	27.66	31.22	34.77	36.20			
Max. current		А	57.47	59.12	60.78	67.88			
COP			4.00	3.89	3.80	3.88			
SCOP			4.08	3.94	3.86	4.02			
Seasonal ope	rating limits		160	155	151	158			
POWER SUF	PPLY								
Phase/Voltag	e/Frequency			3P/380-415	5V/50-60Hz				
PERFORMA	NCE								
Airflow (HS)		m³/h	27000	27000	27000	30500			
Sound pressu	ire (HS)	dB(A)	63.00	63.50	64.00	64.50			
NSTALLATIO	ON								
External dime	ensions (WxHxD)	mm		980x1690x750 + 1410x1690x750					
Shipping dim	nensions (WxHxD)	mm	7	1070x1858x850 + 1515x1858x850					
Net weight/G	ross weight	kg	246/271 + 246/271 246/271 246/271 246/395						
	Туре		Scroll DCI						
Compressor	Brand				ni Electric				
	Number of compressors		2						
Refrigerant				R4	10A				
Charge		kg			0				
Liquid pipe d	iameter	inches		5/8"		3/4"			
Suction pipe		inches		1"1/8		1"1/4			
	diameter haut	inches		1"		1"1/8			
Max. length		m			00				
	equivalent/actual)	m		260	/220				
units (ODU do	. , . ,	m		110	/90				
oudoor units	ght between indoor and (ODU down/up) (2)	m							
Max. height between indoor units (3) m					0				
Standard height between indoor units (4) m					8				
External stati	'	Pa	110						
(min./max.)	or unit power ratio	%							
ndoor units	imber of connectable	quantity	40	50					
OPERATING									
0	e (min./max.)	°C			-52				
Heating mod	e (min./max.)	°C	-27~21						

<sup>(1)</sup> If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
(2) Standard design and production in the factory.
(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 20°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).

## TECHNICAL DATA FOR TWO COMBINATIONS

MODEL			VVEA-900R	VVEA-954R	VVEA-1008R	VVEA-1064R	VVEA-1120R	VVEA-1175R	VVEA-1230R			
			VVEA-450R	VVEA-450R	VVEA-504R	VVEA-504R	VVEA-560R	VVEA-560R	VVEA-615R			
COMBINA	ONE		7VF150014	7VF150014	7VF150015	7VF150015	7VF150016	7VF150016	7VF150017			
COMBINATI	ONS		VVEA-450R	VVEA-504R	VVEA-504R	VVEA-560R	VVEA-560R	VVEA-615R	VVEA-615R			
			7VF150014	7VF150015	7VF150015	7VF150016	7VF150016	7VF150017	7VF150017			
Phase						Three phases						
Power		HP	32	34	36	38	40	42	44			
COOLING M	ODE											
Rated power	*	kW	90.00	95.40	100.80	106.40	112.00	117.50	123.00			
Rated power	input	kW	28.13	30.19	32.26	33.36	34.46	37.23	40.00			
Max. power ir	nput	kW	50.20	53.60	57.00	60.50	64.00	65.00	66.00			
Rated curren	t	Α	46.45	49.86	53.27	55.09	56.91	61.49	66.06			
Max. current		А	82.91	88.52	94.14	99.92	105.70	107.35	109.00			
EER			3.20	3.16	3.12	3.19	3.25	3.16	3.08			
SEER			6.86	6.64	6.48	6.15	5.90	5.81	5.74			
Seasonal ope	rating limits		271	263	256	243	233	229	227			
HEATING M	•		2/1	203	230	243	255	223	221			
Rated power		kW	90.00	95.40	100.80	106.40	112.00	117.50	123.00			
Rated power		kW	22.78	25.09	27.40	29.47	31.55	33.69	35.82			
Max. power in	•	kW	45.40	48.20	51.00	54.90	58.80	59.80	60.80			
Rated curren					45.25							
Max. current		A	37.63	41.44		48.68	52.11	55.63	59.16			
		А	74.98	79.60	84.23	90.67	97.11	98.76	100.41			
COP			3.95	3.80	3.68	3.61	3.55	3.49	3.43			
	SCOP		4.21	4.08	3.99	3.96	3.93	3.83	3.76			
Seasonal ope	-		165	160	157	155	154	150	147			
POWER SUF												
Phase/Voltag					3F	P/380-415V/50-60I	Hz					
PERFORMA	NCE	- /-										
Airflow (HS)		m³/h	34000	34000	34000	36000	38000	38000	38000			
Sound pressu	, ,	dB(A)	65.00	65.50	66.00	66.00	66.00	66.50	67.00			
INSTALLATIO												
	ensions (WxHxD)	mm										
	ensions (WxHxD)	mm	1515x1858x850 + 1515x1858x850									
Net weight/G	-	kg	3	366/395 + 366/39	5	366/395 +	- 375/404	375/404	+ 375/404			
	Type					Scroll DCI						
Compressor	Brand				1	Mitsubishi Electri	С					
	Number of compressors					4						
Refrigerant						R410A						
Charge		kg				20						
Liquid pipe d	iameter	inches				3/4"						
Suction pipe	diameter	inches	1"	1/4			1"1/2					
Suction pipe	diameter haut	inches	1"1	1/8			1"3/8					
Max. length		m				1000						
Max. length (	equivalent/actual)	m				260/220						
Max. height b units (ODU de	petween indoor and oudoor pwn/up) (1)	m				110/90						
Standard height between indoor and oudoor units (ODU down/up) (2)		m				50/40						
-	etween indoor units (3)	m				30						
Standard height between indoor units (4) m		m				18						
External static pressure Pa		Pa				110						
(min./max.)	or unit power ratio	%				50~130						
indoor units	mber of connectable	quantity	53	56	59	63	64	64	64			
OPERATING												
Cooling mode		°C				-5~52						
Heating mod	e (min./max.)	°C				-27~21						

<sup>(1)</sup> If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
(2) Standard design and production in the factory.
(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).

# 3-pipes with heat recovery

### TECHNICAL DATA FOR THREE COMBINATIONS

MODEL			VVEA-1300R	VVEA-1350R	VVEA-1404R	VVEA-1458R	VVEA-1512R	VVEA-1568R		
			VVEA-400R	VVEA-450R	VVEA-450R	VVEA-450R	VVEA-504R	VVEA-504R		
			7VF150013	7VF150014	7VF150014	7VF150014	7VF150015	7VF150015		
			VVEA-450R	VVEA-450R	VVEA-450R	VVEA-504R	VVEA-504R	VVEA-504R		
COMBINATI	ONS		7VF150014	7VF150014	7VF150014	7VF150015	7VF150015	7VF150015		
			VVEA-450R	VVEA-450R	VVEA-504R	VVEA-504R	VVEA-504R	VVEA-560R		
			7VF150014	7VF150014	7VF150015	7VF150015	7VF150015	7VF150016		
Phase			/VFI50014	/VF150014			/VF150015	/VF150016		
Power		HP	46	48	50	phases 52	54	56		
	ODE	ПР	40	40	50	52	54	20		
COOLING M		kW	130.00	135.00	140.40	145.80	151.20	156.80		
Rated power		kW	40.43	42.19	44.25	46.32	48.39	49.49		
Max. power in		kW	69.40	75.30	78.70	82.10	85.50	89.00		
Rated current		A	66.77	69.67	73.09	76.50	79.91	81.73		
Max. current	•	Α	114.61	124.36	129.97	135.59	141.20	146.98		
EER			3.22	3.20	3.17	3.15	3.12	3.17		
SEER			6.70	6.86	6.70	6.58	6.48	6.25		
Seasonal ope	rating limits		265	271	265	260	256	247		
HEATING MO	-		203	2/1	200	200	250	217		
Rated power		kW	130.00	135.00	140.40	145.80	151.20	156.80		
Rated power		kW	33.31	34.18	36.48	38.79	41.10	43.17		
Max. power in		kW	63.80	68.10	70.90	73.70	76.50	80.40		
Rated current		A	55.01	56.44	60.25	64.06	67.87	71.30		
Max. current	•	A	105.37	112.47	117.09	121.72	126.34	132.78		
COP		, ,	3.90	3.95	3.85	3.76	3.68	3.63		
SCOP			4.08	4.21	4.12	4.05	3.99	3.97		
Seasonal ope	rating limits		160	165	162	159	157	156		
POWER SUF	-									
Phase/Voltag					3P/380-415	5V/50-60Hz				
PERFORMA					,	.,,				
Airflow (HS)		m³/h	51000	51000	51000	51000	53000	30500		
Sound pressu	ire (HS)	dB(A)	67.00	67.00	67.50	68.00	68.00	64.50		
INSTALLATIO	, ,	( )								
External dime	ensions (WxHxD)	mm	980x1690x750 + 980x1690x750 + 980x1690x750		1410x1690x750	) + 1410x1690x750 +	1410x1690x750			
Shipping dim	ensions (WxHxD)	mm	1070x1858x850 + 1515x1858x850 + 1515x1858x850	515x1858x850 + 1515x1858x850 + 1515x1858x850 + 1515x1858x850						
Net weight/G	ross weight	kg	257/282 + 366/395 + 366/395							
	Type				Scro	II DCI				
Compressor	Brand				Mitsubish	ni Electric				
	Number of compressors		5							
Refrigerant					R4	10A				
Charge		kg				0				
Liquid pipe di	iameter	inches				/4"				
Suction pipe		inches				1/2				
Suction pipe	diameter haut	inches	1"3/8							
Max. length		m			10	00				
Max. length (e	equivalent/actual)	m			260,	/220				
units (ODU do	, , ,	m			110	/90				
Standard height between indoor and oudoor units (ODU down/up) (2)						/40				
Max. height between indoor units (3) m					0					
Standard height between indoor units (4) m					8					
External static pressure Pa Indoor/outdoor unit power ratio  (min frace) %					10 -130					
(min./max.) Maximum nu indoor units	mber of connectable	quantity			6	54				
OPERATING	LIMITS									
Cooling mode		°C			-5	~52				
Heating mod	,	°C								
	,,	J	-27~21							

(1) If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
(2) Standard design and production in the factory.
(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).

## TECHNICAL DATA FOR THREE COMBINATIONS

MODEL			VVEA-1624R	VVEA-1680R	VVEA-1735R	VVEA-1790R	VVEA-1845R			
			VVEA-504R	VVEA-560R	VVEA-560R	VVEA-560R	VVEA-615R			
			7VF150015	7VF150016	7VF150016	7VF150016	7VF150017			
			VVEA-560R	VVEA-560R	VVEA-560R	VVEA-615R	VVEA-615R			
COMBINATI	ONS		7VF150016	7VF150016	7VF150016	7VF150017	7VF150017			
			VVEA-560R	VVEA-560R	VVEA-615R	VVEA-615R	VVEA-615R			
			7VF150016	7VF150016	7VF150017	7VF150017	7VF150017			
Phase			7 41 130010	741 150010	Three phases	7 11 150017	7 41 130017			
Power		HP	58	60	62	64	66			
COOLING M	ODE	TIF	50	00	02	04	00			
Rated power		kW	162.40	168.00	173.50	179.00	184.50			
Rated power		kW	50.59	51.69	54.46	57.23	60.00			
Max. power in	·	kW	92.50	96.00	97.00	98.00	99.00			
Rated current	•	A	83.55	85.37	89.94	94.52	99.09			
Max. current	•	A	152.76	158.54	160.20	161.85	163.50			
EER			3.21	3.25	3.19	3.13	3.08			
SEER			6.06	5.90	5.84	5.79	5.74			
Seasonal ope	rating limits		239	233	231	229	227			
HEATING MO	-		233	کی	231	223	221			
Rated power		kW	162.40	168.00	173.50	179.00	184.50			
Rated power		kW	45.25	47.33	49.46	51.60	53.73			
Max. power in		kW	45.25 84.30	47.33 88.20	49.46 89.20	90.20	91.20			
Rated current	•	A	84.30 74.73	88.20 78.16	89.20 81.68	90.20	91.20			
Max. current		A	139.22	145.66	81.68	85.21 148.97	150.62			
		А								
COP			3.59	3.55	3.51	3.47	3.43			
SCOP	and a second second		3.95	3.93	3.86	3.81	3.76			
Seasonal ope	-		155	154	151	149	147			
POWER SUF					70/700 (75) //50 5011					
Phase/Voltag					3P/380-415V/50-60Hz					
PERFORMAI	NCE	7/1	55000	FFOOO	FFIOOO	FE000	FF000			
Airflow (HS)	(110)	m³/h	55000	57000	57000	57000	57000			
Sound pressu	, ,	dB(A)	68.00	68.00	68.00	68.50	69.00			
INSTALLATIO										
	ensions (WxHxD)	mm	1410x1690x750 + 1410x1690x750 + 1410x1690x750							
Shipping dim	ensions (WxHxD)	mm	1515x1858x850 + 1515x1858x850 + 1515x1858x850							
Net weight/G	ross weight	kg	366/395 + 375/404 + 375/404		375/404 + 375/	/404 + 375/404				
	Type				Scroll DCI					
Compressor	Brand				Mitsubishi Electric					
	Number of compressors				6					
Refrigerant					R410A					
Charge		kg			30					
Liquid pipe di	iameter	inches			3/4"					
Suction pipe	diameter	inches			1"5/8					
Suction pipe	diameter haut	inches			1"1/2					
Max. length		m			1000					
Max. length (e	equivalent/actual)	m			260/220					
Max. height b units (ODU do	petween indoor and oudoor own/up) (1)	m			110/90					
	ght between indoor and (ODU down/up) (2)	m			50/40					
		m			30					
Standard height between indoor units (4)		m			18					
External static pressure		Pa			110					
Indoor/outdoor unit power ratio (min./max.) %			50~130							
. ,	mber of connectable	quantity	64							
OPERATING	LIMITS									
Cooling mode		°C			-5~52					
Heating mod	,	°C			-27~21					

(1) If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
(2) Standard design and production in the factory.
(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 20°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).

# 3-pipes with heat recovery

#### TECHNICAL DATA FOR FOUR COMBINATIONS

MODEL		VVEA-1908R									
MODEL			VVEA-1908R VVEA-450R	VVEA-450R	VVEA-2016R VVEA-504R	VVEA-504R	VVEA-2128R VVEA-504R	VVEA-2184R VVEA-504R			
			7VF150014	7VF150014	7VF150015	7VF150015	7VF150015	7VF150015			
			VVEA-450R	VVEA-504R	VVEA-504R	VVEA-504R	VVEA-504R	VVEA-560R			
				1	7VF150015	1	1				
COMBINATI	ONS		7VF150014 VVEA-504R	7VF150015 VVEA-504R	VVEA-504R	7VF150015 VVEA-504R	7VF150015 VVEA-560R	7VF150016 VVEA-560R			
				1	1	1	7VF150016	1			
				7VF150015	7VF150015	7VF150015		7VF150016			
				VVEA-504R	VVEA-504R	VVEA-560R	VVEA-560R	VVEA-560R			
			7VF150015	7VF150015	7VF150015	7VF150016	7VF150016	7VF150016			
Phase		LID	60	F0	Three phases	П/	RC.	Three phases			
Power		HP	68	70	72	74	76	78			
COOLING M		kW	190.80	196.20	201.60	207.20	212.80	218.40			
Rated power				62.45				67.82			
Rated power	•	kW kW	60.38		64.52	65.62	66.72				
Max. power in	•		107.20	110.60	114.00	117.50	121.00	124.50			
Rated curren	ι	A	99.72	103.14	106.55	108.37	110.19	112.01			
Max. current		Α	177.04	182.66	188.27	194.05	199.83	205.61			
EER			3.16	3.14	3.12	3.16	3.19	3.22			
SEER			6.64	6.55	6.48	6.30	6.15	6.02			
Seasonal ope	-		263	259	256	249	243	238			
HEATING M		1	***	***							
Rated power		kW	190.80	196.20	201.60	207.20	212.80	218.40			
Rated power	'	kW	50.18	52.49	54.79	56.87	58.95	61.02			
Max. power ir	'	kW	96.40	99.20	102.00	105.90	109.80	113.70			
Rated curren	t	Α	82.88	86.68	90.49	93.92	97.35	100.78			
Max. current		Α	159.21	163.83	168.45	174.89	181.34	187.78			
COP			3.80	3.74	3.68	3.64	3.61	3.58			
SCOP			4.08	4.04	3.99	3.98	3.96	3.94			
Seasonal ope	Seasonal operating limits		160	159	157	156	155	155			
POWER SUF											
Phase/Voltag	e/Frequency				3P/380-415	5V/50-60Hz					
PERFORMA	NCE										
Airflow (HS)		m³/h	68000	68000	68000	70000	72000	74000			
Sound pressu	ıre (HS)	dB(A)	69.00	69.00	69.00	69.00	69.00	69.00			
INSTALLATIO	NC										
External dime	ensions (WxHxD)	mm		1410x1690x7	50 + 1410x1690x750	+ 1410x1690x750 + 14	410x1690x750				
Shipping dim	nensions (WxHxD)	mm	1515x1858x850 + 1515x1858x850 + 1515x1858x850 + 1515x1858x850								
						366/395	366/395	366/395			
Net weight/G	ross weight	kg	366/395	+ 366/395 + 366/395	+ 366/395	+ 366/395	+ 366/395	+ 375/404			
			300/395 + 300/395 + 300/395 + 300/395 + 375/404 + 375/404 + 375/404 + 375/404 + 375/404								
	Туре		Scroll DCI								
Compressor	Brand		Mitsubishi Electric								
	Number of compressors		MILSUDISHI Electric  8								
Refrigerant			8 <b>R410A</b>								
Charge		kg			4	O+					
Liquid pipe d	iameter	inches			7/	/8"					
Suction pipe		inches	1"3/4								
	diameter haut	inches	1"5/8								
Max. length		m				00					
	equivalent/actual)	m				/220					
	between indoor and oudoor										
	units (ODU down/up) (1)				IIC	/90					
Standard height between indoor and oudoor units (ODU down/up) (2)			50/40								
Max. height between indoor units (3) m				3	0						
Standard height between indoor units (4) m				1	8						
	External static pressure Pa					10					
	or unit power ratio	%		50~130							
,	imber of connectable	quantity			6	54					
OPERATING	LIMITS										
Cooling mode		°C			-5	~52					
Heating mod	e (min./max.)	°C			-27	7~21					

<sup>(1)</sup> If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.
(2) Standard design and production in the factory.
(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).

## TECHNICAL DATA FOR FOUR COMBINATIONS

MODEL			VVEA-2240R	VVEA-2295R	VVEA-2350R	VVEA-2405R	VVEA-2460R			
			VVEA-560R	VVEA-560R	VVEA-560R	VVEA-560R	VVEA-615R			
			7VF150016	7VF150016	7VF150016	7VF150016	7VF150017			
			VVEA-560R	VVEA-560R	VVEA-560R	VVEA-615R	VVEA-615R			
	a.v.a		7VF150016	7VF150016	7VF150016	7VF150017	7VF150017			
COMBINATI	ONS		VVEA-560R	VVEA-560R 7VF150016	VVEA-615R	VVEA-615R	VVEA-615R			
			7VF150016		7VF150017	7VF150017	7VF150017			
			VVEA-560R	VVEA-615R	VVEA-615R	VVEA-615R	VVEA-615R			
			7VF150016	7VF150017	7VF150017	7VF150017	7VF150017			
Phase			711.000.0	711.150011	Three phases	711.100017	711100011			
Power		HP	80	82	84	86	88			
COOLING M	ODF									
Rated power		kW	224.00	229.50	235.00	240.50	246.00			
Rated power i		kW	68.92	71.69	74.46	77.23	80.00			
Max. power in		kW	128.00	129.00	130.00	131.00	132.00			
Rated current		Α	113.83	118.40	122.97	127.55	132.12			
Max. current		Α	211.39	213.04	214.70	216.35	218.00			
EER		, ,	3.25	3.20	3.16	3.11	3.08			
SEER			5.90	5.86	5.81	5.77	5.74			
Seasonal oper	rating limits		233	231	229	228	227			
HEATING MO	0		255	231	223	220	221			
Rated power*		kW	224.00	229.50	235.00	240.50	246.00			
Rated power i		kW	63.10	65.24	67.37	69.51	71.64			
Max. power in		kW	117.60	118.60	119.60	120.60	121.60			
max. power in Rated current		A	104.21	107.74	111.26	120.60	121.60			
Max. current		A	194.22	195.87	197.52	199.17	200.82			
COP		А	3.55	3.52	3.49	3.46	3.43			
SCOP	and a second		3.93	3.88	3.83	3.79	3.76			
Seasonal oper	•		154	152	150	149	147			
POWER SUP					75/700 (75) (/50 60) 1					
Phase/Voltage					3P/380-415V/50-60Hz					
PERFORMA	NCE	- /								
Airflow (HS)		m³/h	76000	76000	76000	76000	76000			
Sound pressu	, ,	dB(A)	69.00	69.00	69.50	70.00	70.00			
INSTALLATIO										
	ensions (WxHxD)	mm			0x1690x750 + 1410x1690x					
	ensions (WxHxD)	mm	1515x1858x850 + 1515x1858x850 + 1515x1858x850 + 1515x1858x850							
Net weight/G	-	kg	375/404 + 375/404 + 375/404 + 375/404							
	Type		Scroll DCI							
Compressor	Brand				Mitsubishi Electric					
	Number of compressors				8					
Refrigerant					R410A					
Charge		kg			40					
_iquid pipe di	ameter	inches		7/8"		1	n			
Suction pipe o	diameter	inches		1"3/4		2	,n -			
Suction pipe o	diameter haut	inches		1"5/8		1"3	3/4			
Max. length		m			1000					
Max. length (e	equivalent/actual)	m			260/220					
Max. height b units (ODU do	etween indoor and oudoor own/up) (1)	m			110/90					
Standard heig oudoor units (	ght between indoor and (ODU down/up) (2)	m			50/40					
Max. height b	etween indoor units (3)	m			30					
Standard height between indoor units (4)		m			18					
External static pressure		Pa			110					
ndoor/outdoo min./max.)	or unit power ratio	%	50~130							
Maximum nu ndoor units	mber of connectable	quantity	64							
OPERATING	LIMITS									
Cooling mode	e (min./max.)	°C			-5~52					
Heating mode	e (min./max.)	°C			-27~21					

<sup>(1)</sup> If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.

<sup>(2)</sup> Standard design and production in the factory.
(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.
(4) Standard design and production in the factory.

\* All the specifications are tested under nominal condition (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°CWB).









#### + PRODUCT

- Water condensation
- Co-axial heat exchangers
- Compact design
- Quiet







(optional, see configuration page 59)

#### **FEATURES**

#### **TECHNOLOGY**



#### INSTALLER FUNCTIONS







# **WATER FLOWLOGIC**

# VRF Water condensing



#### THE **O** «SUSTAINABLE DEVELOPMENT»

- > High energy efficiency (COP > 6).
- > Energy recovery from water loops.

#### THE O «USER»

- > 100% indoor application.
- > Practical and discreet solution.

#### THE **O** «INSTALLER»

- > Stacked installation is possible.
- > Up to 300 m of refrigeration network and 50 m height difference.

#### THE **O** «TECHNOLOGY»

- > Up to 19 indoor units.
- > Outside temperature does not affect performance.
- > Airconnect Pro: remote maintenance and management option.

#### **ACCESSORIES**

ACCESSORY	PART NUMBER	REF.	РНОТО	FUNCTION	COMMENT
Gather pipe kit for 2 outdoor groups	7ACFHH013	TBS20	E	Refrigerant gathering	• For 2 outdoor groups
Gather pipe kit for 3 outdoor groups	7ACFHH014	TBS30	=	Refrigerant gathering	• For 3 outdoor groups
Gather pipe kit for 4 outdoor groups	7ACFHH014 + 7ACFHH015	TBS30 + TAU2040		Refrigerant gathering	• For 4 outdoor groups
	7ACFHH001	TAU335		Refrigerant gathering	• 33.5 kW > Total IDU power
	7ACFHH002	TAU506		Refrigerant gathering	• 33.5 kW ≤ Total IDU power < 50.6 kW
Manifold pipe (gas + liquid)	7ACFHH003	TAU730	-	Refrigerant gathering	• 50.6 kW ≤ Total IDU power < 73 kW
	7ACFHH004	TAU1350	- 1	Refrigerant gathering	• 73 kW ≤ Total IDU power < 135 kW
	7ACFHH015	TAU2040		Refrigerant gathering	• 135 kW ≤ Total IDU power
Maintenance tool	7ACELH014	TD02	E	Working parameters monitoring and recording tool	
Smart WiFi module	7ACEL1869		Pirant	Remote control by the smart WiFi module and controlled by the AirConnect Smart application	• Module diimensions: 86x86x12 mm.

## TECHNICAL DATA

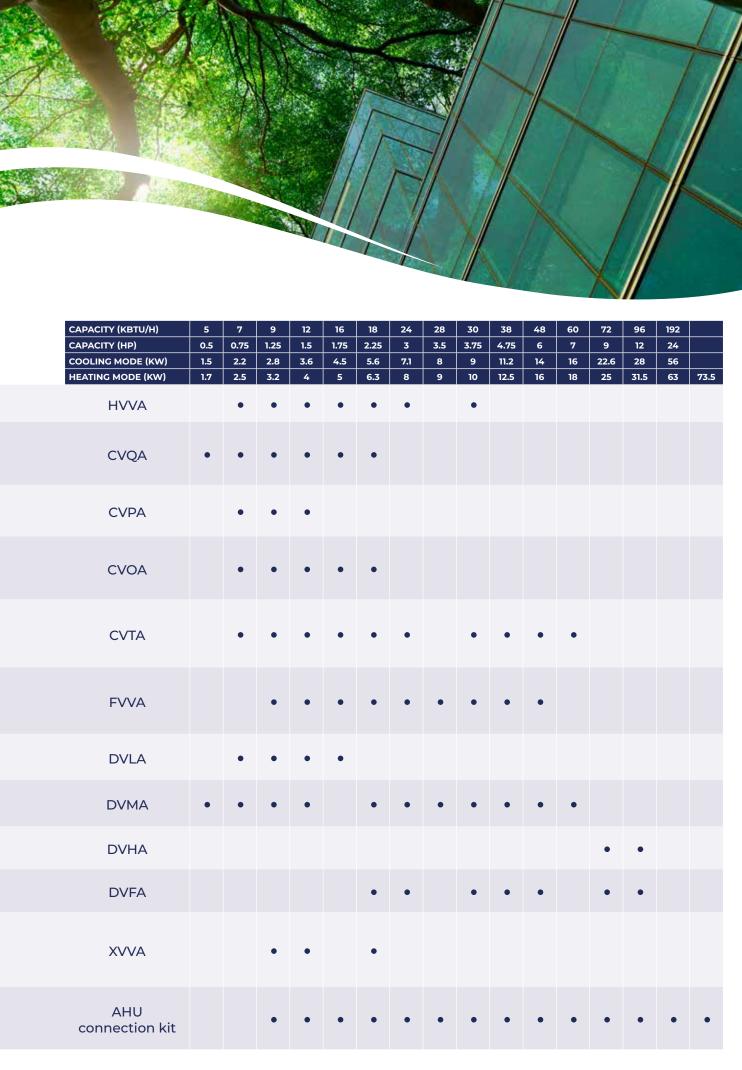
8 22.4 25 3P/380-400V/50-60Hz 4.50 13.00 7.20 20.79 4.15 13.00 6.64 20.79 4.98 6.02 4.8 50 61 775x995x545 875x1182x655	75P14H039  10  28  31.5  3P/380-400V/50-60Hz  6.00  15.00  9.60  23.99  5.80  15.00  9.28  23.99  4.67  5.43	7SP14H040  12  33.5  37.5  3P/380-400V/50-60H: 7.70  17.00  12.32  27.19  7.80  17.00  12.47  27.19  4.35  4.81  7.2  53  64
22.4 25 3P/380-400V/50-60Hz 4.50 13.00 7.20 20.79 4.15 13.00 6.64 20.79 4.98 6.02 4.8 50 61	28 31.5 3P/380-400V/50-60Hz 6.00 15.00 9.60 23.99 5.80 15.00 9.28 23.99 4.67 5.43	33.5 37.5 37.5 37.5 37.5 37.5 37.5 37.5
22.4 25 3P/380-400V/50-60Hz 4.50 13.00 7.20 20.79 4.15 13.00 6.64 20.79 4.98 6.02 4.8 50 61	28 31.5 3P/380-400V/50-60Hz 6.00 15.00 9.60 23.99 5.80 15.00 9.28 23.99 4.67 5.43	33.5 37.5 37.5 37.5 37.5 37.5 37.5 37.5
25  3P/380-400V/50-60Hz  4.50  13.00  7.20  20.79  4.15  13.00  6.64  20.79  4.98  6.02  4.8  50  61	31.5  3P/380-400V/50-60Hz  6.00  15.00  9.60  23.99  5.80  15.00  9.28  23.99  4.67  5.43	37.5  3P/380-400V/50-60H: 7.70  17.00  12.32  27.19  7.80  17.00  12.47  27.19  4.35  4.81
3P/380-400V/50-60Hz 4.50 13.00 7.20 20.79 4.15 13.00 6.64 20.79 4.98 6.02  4.8 50 61	3P/380-400V/50-60Hz 6.00 15.00 9.60 23.99 5.80 15.00 9.28 23.99 4.67 5.43	3P/380-400V/50-60H: 7:70 17:00 12:32 27:19 7:80 17:00 12:47 27:19 4:35 4:81
4.50 13.00 7.20 20.79 4.15 13.00 6.64 20.79 4.98 6.02  4.8 50 61	6.00 15.00 9.60 23.99 5.80 15.00 9.28 23.99 4.67 5.43	7.70 17.00 12.32 27.19 7.80 17.00 12.47 27.19 4.35 4.81
4.50 13.00 7.20 20.79 4.15 13.00 6.64 20.79 4.98 6.02  4.8 50 61	6.00 15.00 9.60 23.99 5.80 15.00 9.28 23.99 4.67 5.43	7.70 17.00 12.32 27.19 7.80 17.00 12.47 27.19 4.35 4.81
4.50 13.00 7.20 20.79 4.15 13.00 6.64 20.79 4.98 6.02  4.8 50 61	6.00 15.00 9.60 23.99 5.80 15.00 9.28 23.99 4.67 5.43	7.70 17.00 12.32 27.19 7.80 17.00 12.47 27.19 4.35 4.81
13.00 7.20 20.79 4.15 13.00 6.64 20.79 4.98 6.02  4.8 50 61	15.00 9.60 23.99 5.80 15.00 9.28 23.99 4.67 5.43	17.00 12.32 27.19 7.80 17.00 12.47 27.19 4.35 4.81
7.20 20.79 4.15 13.00 6.64 20.79 4.98 6.02  4.8 50 61	9.60 23.99 5.80 15.00 9.28 23.99 4.67 5.43	12.32 27.19 7.80 17.00 12.47 27.19 4.35 4.81
20.79 4.15 13.00 6.64 20.79 4.98 6.02  4.8 50 61	23.99 5.80 15.00 9.28 23.99 4.67 5.43	27.19 7.80 17.00 12.47 27.19 4.35 4.81
4.15 13.00 6.64 20.79 4.98 6.02  4.8 50 61	5.80 15.00 9.28 23.99 <b>4.67</b> <b>5.43</b> 6 51	7.80 17.00 12.47 27.19 4.35 4.81
13.00 6.64 20.79 4.98 6.02 4.8 50 61	15.00 9.28 23.99 <b>4.67</b> <b>5.43</b> 6 51 62	17.00 12.47 27.19 <b>4.35</b> <b>4.81</b> 7.2
6.64 20.79 <b>4.98</b> <b>6.02</b> 4.8 50 61	9.28 23.99 <b>4.67</b> <b>5.43</b> 6 51 62	12.47 27.19 4.35 4.81 7.2 53
20.79 4.98 6.02 4.8 50 61 775x995x545	23.99 4.67 5.43 6 51 62	27.19 4.35 4.81 7.2 53
4.98 6.02 4.8 50 61 775x995x545	<b>4.67 5.43</b> 6 51 62	<b>4.35 4.81</b> 7.2  53
6.02 4.8 50 61 775x995x545	5.43 6 51 62	<b>4.81</b> 7.2 53
4.8 50 61 775x995x545	6 51 62	7.2 53
50 61 775x995x545	51 62	53
50 61 775x995x545	51 62	53
61 775x995x545	62	
775x995x545		64
	775,005,57.5	
	775,005,575	
07Ev1102v6EE	773833343	775x995x545
673X1162X633	875x1182x655	875x1182x655
172/183	172/183	172/183
Scroll DCI	Scroll DCI	Scroll DCI
R410A/2088	R410A/2088	R410A/2088
2	2	2
3/8"	3/8"	1/2"
3/4"	7/8"	1"
3/8"	3/8"	3/8"
300	300	300
150/120	150/120	150/120
50/40	50/40	50/40
DN32	DN32	DN32
DN32	DN32	DN32
35	50	70
		inner grooved
		1.6
		7°/45°
1 140	7 /45	7 145
E0 370	FO 170	FO 170
		50-130
	R410A/2088  2 3/8" 3/4" 3/8" 300 150/120 50/40  DN32 DN32	R410A/2088     R410A/2088       2     2       3/8"     3/8"       3/8"     3/8"       300     300       150/120     150/120       50/40     50/40       DN32     DN32       DN32     DN32       35     50       inner grooved     inner grooved       1.6     7°/45°       50-130     50-130

# **INDOOR UNITS**

The indoor units of the VRF range adapt to all destinations and all projects. From the 4-way cassette to the 360° cassette, from the extra-flat duct to the high-pressure duct and from the wall to the ceiling-light, Airwell meets all the needs in terms of thermal comfort.

- ▶ Fitted with DC inverter fan motors offering high aeraulic performance with a very low sound level and an electronic expansion valve offering 475 opening steps, the indoor units in the range will combine **comfort and performance**.
- ▶ The entire range of indoor units offers a **standard dry contact** allowing the unit to be controlled through a window or door contact or a «room card» for a hotel application.
- ▶ At Airwell, each indoor unit is delivered with its RWV05 wired or RCV03 infrared remote control.

	INDOOR UNIT M	ODELS		REFRIGERANT TYPE	
p.40	-	HIGH WALL	HVVA	R410A	
p.41		CASSETTE 600X600	CVQA	R410A	
p.42		1-WAY CASSETTE	CVPA	R410A	
p.43	1	2-WAYS CASSETTE	CVOA	<b>R</b> 410A	
p.44		CASSETTE 360°	CVTA	R410A	
p.45		FLOOR CEILING	FVVA	R410A	
p.46		DUCTED LOW STATIC PRESSURE	DVLA	R410A	
p.47		DUCTED MEDIUM STATIC PRESSURE	DVMA	R410A	
p.48		DUCTED HIGH STATIC PRESSURE	DVHA	R410A	
p.49		FULL FRESH AIR UNIT	DVFA	R410A	
p.50		CONSOLE	XVVA	R410A	
p.52		AHU CONNECTION KIT			





## VRF <u>In</u>door units

# **HVVA**High wall





RCV03 included

## + PRODUCT

- RCV03 remote control included (see page 60)
- DC Inverter tangential fan
- Panel digital screen
- Dry contact available



## **FEATURES**

#### **TECHNOLOGY**



## **FUNCTIONS USERS**







## **INSTALLER FUNCTIONS**





## THE **O** «SUSTAINABLE DEVELOPMENT»

> Energy savings (mode locking, setpoint limits).

## THE **O** «USER»

- > Simple and elegant design.
- > Silent operation.
- > Multiple applications can be connected using the dry contact: room card, presence detector.

## THE **O** «INSTALLER»

> Slim design.

Net weight/Gross weight

Liquid pipe diameter

Suction pipe diameter

## THE **O** «TECHNOLOGY»

> Optimal regulation thanks to its electronic expansion valve.

## **TECHNICAL DATA**

INDOOR UNIT		HVVA-025/022N- 01M22		HVVA- 035N- 01M22	HVVA-050/045N- 01M22		HVVA- 070N- 01M22	HVVA- 090N- 01M22	
Part number		7VF020001		7VF020002	7VF020003		7VF020004	7VF020005	
Phase			Single phase						
RATED POWER									
Caalinaaaada	kBtu/h	7.50	9.50	12.30	15.30	19.10	24.20	30.70	
Cooling mode	kW	2.20	2.80	3.60	4.50	5.60	7.10	9.00	
Hanking was de	kBtu/h	8.50	10.90	13.60	17.10	21.50	27.30	34.10	
Heating mode	kW	2.50	3.20	4.00	5.00	6.30	8.00	10.00	
ELECTRICAL PARAMETER	ELECTRICAL PARAMETERS								
Phase/Voltage/Frequency		1P/220-240V/50-60Hz							
PERFORMANCES									

Phase/Voltage/Frequency		1P/220-240V/50-60Hz							
PERFORMANCES									
Airflow (LS/MS/HS)	m³/h	420/480/ 550	470/530/ 600	500/560/ 630	650/720/ 800	720/800/ 920	800/920/ 1010	1400/1500/ 1600	
Sound pressure (LS/MS/HS)	dB(A)	29/31/35 29/31/36		29/33/37	34/36/39	35/39/40	36/40/44	41/44/49	
Sound power level (LS/MS/HS)	dB(A)	42/47/50 44/48/52		50/51/54	51/53/56	52/54/57	54/56/58	54/58/61	
INSTALLATION									
External dimensions (WxHxD)	mm	855x280x208		855x280 x208	1115x336x243		1115x336 x243	1316x365 x270	
Shipping dimensions (WxHxD)	mm	954x355x279		954x355 x279	1206x418x342		1206x418 x342	1403x463 x384	

9.9/12

1/4"

15.8/18.9

1/4"

1/2"

15.8/18.9

3/8"

5/8"

21.8/26.3

3/8"

5/8"

9.9/12

1/4"

3/8"

kg

inches

inches

# Cassette 600x600









RWV05 included

## THE **O** «SUSTAINABLE DEVELOPMENT»

> Energy savings (mode locking, setpoint limits).

#### THE **O** « USER »

- > Air renewal by supply of fresh air.
- > Multiple applications can be connected using the dry contact: room card, presence detector.

#### THE **O** «INSTALLER»

- > Easy integration into false ceilings thanks to its reduced height.
- > Simple installation thanks to its integrated condensates pump.

## THE **O** «TECHNOLOGY»

- > Optimal regulation thanks to its electronic expansion valve.
- > Individual opening of each flap.

## **TECHNICAL DATA**

INDOOR UNIT		CVQA	-025/022/015N	I-01M22	CVQA-050/045/035N-01M22		
Part number			7VF040001			7VF040002	
Phase				Single	phase		
RATED POWER							
Cooling mode	kBtu/h	5.10	7.50	9.50	12.30	15.30	19.10
cooming mode	kW	1.50	2.20	2.80	3.60	4.50	5.60
Heating mode	kBtu/h	5.80	8.50	10.90	13.60	17.10	21.50
_	kW	1.70	2.50	3.20	4.00	5.00	6.30
ELECTRICAL PARAMETERS							
Phase/Voltage/Frequency		1P/220-240V/50-60Hz					
PERFORMANCES							
Airflow (LS/MS/HS)	m³/h		400/450/520		400/450/ 520	450/520/ 650	520/650 760
Sound pressure (LS/MS/HS)	dB(A)		29/30/32		29/30/33		30/32/34
Sound power level (LS/MS/HS)	dB(A)		43/44/46		43/44/47		44/46/48
INSTALLATION							
External dimensions (WxHxD)	mm			570x26	50x570		
Shipping dimensions (WxHxD)	mm			718x38	30x680		
Net weight/Gross weight	kg		16/19			19/22	
Liquid pipe diameter	inches		1/4"			1/4"	
Suction pipe diameter	inches		3/8"			1/2"	
PANEL							
Panel part number				7ACV	F0601		
External dimensions (WxHxD)	mm			620x6	0x620		
Shipping dimensions (WxHxD)	mm			660x1	15x660		

## **VRF** Indoor units



## + PRODUCT

- RWV05 remote control included (see page 61)
- New design
- New DC Inverter fan motor
- Integrated condensates pump
- Fresh air inlet
- Dry contact available



## **FEATURES**

## TECHNOLOGY



## AIR QUALITY / CLEAN



#### **FUNCTIONS USERS**







## **INSTALLER FUNCTIONS**







## DRV Indoor units

## **CVPA**

# 1-way cassette



RWV05 included



## + PRODUCT

- RWV05 remote control included (see page 61)
- Contemporary design
- Integrated condensate pump
- Low noise level



## FEATURES

#### **TECHNOLOGY**



## **USER FUNCTIONS**







### **INSTALLER FUNCTIONS**





## **O** «SUSTAINABLE DEVELOPMENT»

> Energy savings (mode blocking, setpoint limiting).

#### **O** «INSTALLER»

- > Easy integration in false ceilings, thanks to its low thickness.
- > Easy installation, thanks to its integrated condensate pump.

## **○** «TECHNOLOGY»

> Optimal regulation, thanks to its electronic expansion valve.

## TECHNICAL DATA

INDOOR UNIT		CVPA-025/0	022N-01M22	CVPA-035N-01M22		
Part number		7VF04	40004	7VF040003		
Phase		Single phase				
RATED POWER						
Cooling mode	kBtu/h	7.50	9.60	12.30		
Cooling mode	kW	2.20	2.80	3.60		
Heating mode	kBtu/h	8.50	10.90	13.60		
Treating mode	kW	2.50	3.20	4.00		
ELECTRICAL PARAMETERS						
Phase/Voltage/Frequency		1P/220-240V/50-60Hz				
PERFORMANCES						
Airflow (LS/MS/HS)	m³/h	450/49	490/530/550			
Sound pressure (LS/MS/HS)	dB(A)	24/2	25/30/34			
Sound power level (LS/MS/HS)	dB(A)	38/4	39/44/48			
INSTALLATION						
External dimensions (WxHxD)	mm		875x185x505			
Shipping dimensions (WxHxD)	mm		1028x270x581			
Net weight/Gross weight	kg		15.3/17.9			
Liquid pipe diameter	inches		1/4"			
Suction pipe diameter	inches	3/	8"	1/2"		
PANEL						
Panel part number			7ACVFH004			
External dimensions (WxHxD)	mm		1050x122x560			
Shipping dimensions (WxHxD)	mm	1133x197x623				
Net weight/Gross weight	kg		5.3/8.3			

# **CVOA**

## 2-ways cassette



## **O** «SUSTAINABLE DEVELOPMENT»

> Energy savings (mode blocking, setpoint limiting).

#### **O** «INSTALLER»

- > Easy integration in false ceilings, thanks to its low thickness.
- > Easy installation, thanks to its integrated condensate pump.

## \*TECHNOLOGY

Net weight/Gross weight

> Optimal regulation, thanks to its electronic expansion valve.

## TECHNICAL DATA

INDOOR UNIT		CVOA-025N- 01M22	CVOA-035N- 01M22	CVOA-050/0	940-01M22		
Part number		7VF040005	7VF040006	7VF04	0007		
Phase		Single phase					
RATED POWER							
Cooling mode	kBtu/h	9.60	12.30	15.40	19.10		
	kW	2.80	3.60	4.50	5.60		
Heating mode	kBtu/h	10.90 <b>3.20</b>	13.60 <b>4.00</b>	17.10 <b>5.00</b>	21.50 <b>6.30</b>		
ELECTRICAL PARAMETERS	KVV	3.20	4.00	5.00	6.30		
Phase/Voltage/Frequency		1P/220-240V/50-60Hz					
PERFORMANCES							
Airflow (LS/MS/HS)	m³/h	550/700/840	550/700/840	550/700/840			
Sound pressure (LS/MS/HS)	dB(A)	33/37/42	33/37/42	34/39/44			
Sound power level (LS/MS/HS)	dB(A)	46/50/55	46/50/55	47/52	/57		
INSTALLATION							
External dimensions (WxHxD)	mm		817x220	)x620			
Shipping dimensions (WxHxD)	mm		1015x260	x6950			
Net weight/Gross weight	kg		21/2	3			
Liquid pipe diameter	inches		1/4'	7			
Suction pipe diameter	inches	3/8"	1/2"	1/2	"		
PANEL							
Panel part number			7ACVFI	H005			
External dimensions (WxHxD)	mm	1055x68x680					
Shipping dimensions (WxHxD)	mm		1110x160	)x720			

## DRV Indoor units



## + PRODUCT

- RWV05 remote control included (see page 61)
- Contemporary design
- Integrated condensate pump
- Low noise level







RCV03 (optional)

RWV03 (optional)

RWV07 (optional)

## **FEATURES**

#### **TECHNOLOGY**



## **USER FUNCTIONS**







### **INSTALLER FUNCTIONS**







## VRF Indoor units

## **CVTA**

# Cassette 360°





RWV05 included

## + PRODUCT

- RWV05 remote control included (see page 61)
- 360° air blowing
- New DC Inverter fan motor
- Integrated condensates pump
- Extra-slim cassette
- Fresh air inlet
- Dry contact available



## **FEATURES**

## TECHNOLOGY





## AIR QUALITY / CLEAN



#### **FUNCTIONS USERS**







## INSTALLER FUNCTIONS





## THE **O** «SUSTAINABLE DEVELOPMENT»

> Energy savings (mode locking, setpoint limits).

### THE **O** «USER»

Shipping dimensions

(WxHxD) Net weight/Gross weight mm

kg

- > Optimal comfort with its 360° blown air output.
- > Air renewal by supply of fresh air.
- > Multiple applications can be connected using the dry contact: room card, presence detector.

## THE **O** «INSTALLER»

> Simple installation (180 mm high).

## THE **O** «TECHNOLOGY»

- > Optimal regulation thanks to its electronic expansion valve.
- > Individual opening of each flap.

## TECHNICAL DATA

				СПИ	O, (_ :	<i>-,</i> (1, (					
INDOOR UNIT		025/0	CVTA- 025/022N- 01M22		CVTA- 050/045N- 01M22		CVTA- 070N- 01M22	CVTA- 110/090N- 01M22		CVTA- 160/140N- 01M22	
Part number		7VF040008		7VF04 0009	7VF0	7VF040010		7VF040012		7VF040013	
Phase						Single phase					
RATED POWER											
Cooling mode	kBtu/h	7.50 <b>2.20</b>	9.50 <b>2.80</b>	12.30 <b>3.60</b>	15.30 <b>4.50</b>	19.10 <b>5.60</b>	24.20 <b>7.10</b>	30.70 <b>9.00</b>	38.20 <b>11.20</b>	47.70 <b>14.00</b>	54.60 <b>16.00</b>
Heating mode	kBtu/h	8.50 <b>2.50</b>	10.90	13.60 <b>4.00</b>	17.10 <b>5.00</b>	21.50 <b>6.30</b>	27.30 <b>8.00</b>	34.10 <b>10.00</b>	42.60 <b>12.50</b>	54.60 <b>16.00</b>	61.20
ELECTRICAL PARAM			0.120		5.00	0.00	0.00	10.00	.2.00	10.00	
Phase/Voltage/ Frequency	LILING		1P/220-230V/50-60Hz								
PERFORMANCES											
Airflow (LS/MS/HS)	m³/h	620/810/1000		620/ 810/ 1000	620/81	0/1000	1000/ 1190/ 1380	1670/1860/2050		1720/1910/2100	
Sound pressure (LS/MS/HS)	dB(A)	25/2	7/30	25/27/ 30	27/29/ 32	29/30/ 33	31/34/ 35	31/35/37		36/40/44	
INSTALLATION											
External dimensions (WxHxD)	mm	840x18	33x840	840 x183 x840	840x18	840 340x183x840 x204 x840		840x204x840		840x288x840	
Shipping dimensions (WxHxD)	mm	983x26	58x983	983 x268 x983	983x20	58x983	983 x290 x983	983x331x983		983x3'	73x983
Net weight/Gross weight	kg	25,	/28	25/28	25,	/28	27/30	31/	/36	33,	/38
Liquid pipe diameter Suction pipe diameter	inches inches	1/4" 3/8"		1/4" 1/2"	1/4" 1/2"		3/8" 5/8"	3/8" 5/8"		3/8" 5/8"	
PANEL											
Panel part number						7ACV	'H003				
External dimensions (WxHxD)	mm					950x5	0x950				

1013x123x1025

6.5/9

# **FVVA**

# Floor ceiling









RWV05 included

## THE **O** «SUSTAINABLE DEVELOPMENT»

> Energy savings (mode locking, setpoint limits).

## THE **O** «USER»

- > Air blowing distance up to 11m.
- > Horizontal and vertical airflow swing.
- > Multiple applications can be connected using the dry contact: room card, presence detector.

## THE **O** « INSTALLER »

> Horizontal or vertical installation.

## THE **O** «TECHNOLOGY»

- > Optimal regulation thanks to its electronic expansion valve.
- > New centrifugal fan, acoustic reduction.

## TECHNICAL DATA

INDOOR UNIT		FVVA- 025N- 01M22	FVVA-050/045/035N- 01M22			FVVA-090/080/070N- 01M22			FVVA-140/110N- 01M22		
Part number		7VF01 0001	7VF010002			:	7VF010003			7VF010004	
Phase			Si			ingle pha	se				
RATED POWER											
Cooling mode	kBtu/h	9.50	12.28	15.35	19.11	24.23	27.30	30.71	38.21	48.00	
Cooling mode	kW	2.80	3.60	4.50	5.60	7.10	8.00	9.00	11.20	14.00	
Heating mode	kBtu/h	10.92	13.65	17.06	21.50	27.30	30.71	34.12	42.60	55.00	
	kW	3.20	4.00	5.00	6.30	8.00	9.00	10.00	12.50	16.00	
ELECTRICAL PARAMETERS											
Phase/Voltage/ Frequency			1P/220-230V/50-60Hz								
PERFORMANCES											
Airflow (LS/MS/HS)	m³/h	690/ 750/ 820	690/ 750/ 820	750/ 690/820/950		1240/ 1270/ 1420	1240/1420/1570		1750/1990/2110		
Sound pressure (LS/MS/HS)	dB(A)	34/36/ 38	34/36/ 38	35/3	8/42	41/44/ 46	41/44/47		43/46/50		
Sound power level (LS/MS/HS)	dB(A)	47/50/ 52	47/50/ 52	48/5	51/55	54/58/ 60	54/58/61		57/60/63		
INSTALLATION											
External dimensions (WxHxD)	mm	1000 x680 x230	10	00x680x2	30	1325x680x230		30	1650x680x230		
Shipping dimensions (WxHxD)	mm	779 x1100 x305	1100x779x305			1425x779x305			1750x7	79x305	
Net weight/Gross weight	kg	27.9/ 33.6		27.9/33.6		35.8/42.1		43.5	/50.5		
Liquid pipe diameter	inches	1/4"		1/4"		3/8"			3/	/8"	
Suction pipe diameter	inches	3/8"		1/2"			5/8"		5/	8"	

## **VRF** Indoor units



## + PRODUCT

- RWV05 remote control included (see page 61)
- New DC Inverter fan motor
- New aesthetic and modern design
- New deflectors for better air distribution
- High airflow rate
- Improved component accessibility
- Dry contact available



**FEATURES** 

## **TECHNOLOGY**



## **FUNCTIONS USERS**







#### **INSTALLER FUNCTIONS**





## VRF Indoor units

# **DVLA** Ducted low static pressure





RWV05 included

## + PRODUCT

- RWV05 remote control included (see page 61)
- New DC Inverter fan motor
- Integrated condensates pump
- Extra-slim unit
- Fresh air supply
- Adjustable static pressure 0-30 Pa
- Dry contact available



**FEATURES** 

## TECHNOLOGY





## AIR QUALITY / CLEAN



#### **FUNCTIONS USERS**









## INSTALLER FUNCTIONS





## THE **O** «SUSTAINABLE DEVELOPMENT»

> Energy savings (mode locking, setpoint limits).

## THE **O** «USER»

- > Super quiet 21 dB.
- > Design solution thanks to its motorised panel.
- > Directable airflow.
- > Air renewal by supply of fresh air.
- > Multiple applications can be connected using the dry contact: room card, presence detector.

## THE **O** «INSTALLER»

- > Simple installation: similar dimensions across the range.
- > Slim design 185 mm.

## THE **O** «TECHNOLOGY»

- > Optimal regulation thanks to its electronic expansion valve.
- > Front panel with digital display.

## TECHNICAL DATA

INDOOR UNIT		DVLA-025/	/022-01M22	DVLA- 035-01M22	DVLA- 045-01M22	
Part number		7VF0	30003	7VF030004	7VF030005	
Phase		Single phase				
RATED POWER						
Caslingranda	kBtu/h	7.50	9.50	12.30	15.30	
Cooling mode	kW	2.20	2.80	3.60	4.50	
Hasting was de	kBtu/h	8.50	10.90	13.60	17.10	
Heating mode	kW	2.50	3.20	4.00	5.00	
ELECTRICAL PARAMETERS						
Phase/Voltage/Frequency	1P/220-230V/50-60Hz					
PERFORMANCES						
Airflow (LS/MS/HS)	m³/h	360/42	20/480	370/430/550	460/540/600	
Sound pressure (LS/MS/HS)	dB(A)	20/2	23/27	24/27/30	26/29/32	
Sound power level (LS/MS/HS)	dB(A)	34/3	37/41	38/41/44	40/43/46	
INSTALLATION						
External dimensions (WxHxD)	mm	850x18	35x420	850x185x420	850x185x420	
Shipping dimensions (WxHxD)	mm	1045x2	70x540	1045x270x540	1045x270x540	
Net weight/Gross weight	kg	17.5	/22.5	17.5/22.5	18.5/23.5	
Liquid pipe diameter	inches	1/4"				
Suction pipe diameter	inches	3/	/8"	1/2"		
External static pressure (min./standard/max.)	Pa	0/15/30				

PANE	L
December 1	

Panel part number			7ACVF0587
Dinamaiana (MALIND)	Supply	mm	890x100x190
Dimensions (WxHxD)	Return	mm	890x291x32.4
Shipping dimensions (WxHxD)		mm	938x335x220
Net weight/Gross weight		kg	4/5

# **DVMA** Ducted medium static pressure











RWV05 included

## THE **O** «SUSTAINABLE DEVELOPMENT»

> Energy savings (mode locking, setpoint limits).

### THE **O** « USER »

- > Air renewal by supply of fresh air.
- > Multiple applications can be connected using the dry contact: room card, presence detector.

#### THE **O** « INSTALLER »

- > Ease of installation thanks to its small dimensions.
- > Integrated condensates pump.

## THE **O** «TECHNOLOGY»

- > Optimal regulation thanks to its electronic expansion valve.
- > Adaptability to the ventilation network thanks to its adjustable static pressure.

## TECHNICAL DATA

DVMA-025/022/015N- DVMA- DVMA-

INDOOR UNIT		DVIMA	01M22	./01314	035N- 01M22	045N- 01M22	DVIMA	01M22	)/U3UN	090N- 01M22			40N- 422
Part number		7\	7VF030010 7V			7VF03 0012	7	VF0300	13	7VF03 0014	7VF03 0015	7VF0	30016
Phase							Single	gle phase					
RATED POWER													
Power	HP	0.50	0.80	1.00	1.25	1.70	2.00	2.50	3.00	3.20	4.00	5.00	6.00
Cooling mode	kBtu/h	5.10 <b>1.50</b>	7.50 <b>2.20</b>	9.60 <b>2.80</b>	12.30 <b>3.60</b>	15.30 <b>4.50</b>	19.10 <b>5.60</b>	<b>7.10</b>	27.30 <b>8.00</b>	30.70 <b>9.00</b>	38.20 <b>11.20</b>	47.80 <b>14.00</b>	54.60 <b>16.00</b>
Heating mode	kBtu/h	5.80 <b>1.70</b>	8.50 <b>2.50</b>	10.90 <b>3.20</b>	13.70 <b>4.00</b>	17.00 <b>5.00</b>	21.50 <b>6.30</b>	27.30 <b>8.00</b>	30.70 <b>9.00</b>	34.10 <b>10.00</b>	44.40 <b>13.00</b>	55.60 <b>16.30</b>	61.40 <b>18.00</b>
ELECTRICAL PARAMETE	ERS												
Phase/Voltage/ Frequency						1P/2	220-240	)V/50-6	OHz				
PERFORMANCES													
Airflow (LS/MS/HS)	m³/h	390/ 440/ 515	390/47	70/545	420/ 498/ 570	550/ 625/ 700	640/ 765/ 915	875/10	50/1275	1000/ 1200/ 1450	1400/ 1700/ 2000	1400/ 1750/ 2150	1600/ 1950/ 2350
Sound pressure (LS/MS/HS)	dB(A)	25/27/ 29	25/2	8/30	27/29/ 31	28/30/ 32	29/31/ 33	29/31/ 34	30/33/ 35	30/33/ 36	32/35/ 38	32/36/ 40	34/38/ 42
Sound power level (LS/MS/HS)	dB(A)	37/39/ 41	37/4	0/42	39/41/ 43	40/42/ 44	41/43/ 45	41/43/ 46	42/45/ 47	42/45/ 48	44/47/ 50	44/47/ 52	46/50/ 54
INSTALLATION													
External dimensions (WxHxD)	mm		700	0x248x <sup>r</sup>	700			1100x2	48x700		150	0x248x	700
Shipping dimensions (WxHxD)	mm		932x280x835					1332x280x835			1698x305x857		857
Net weight/Gross weight	kg	27/32				28.5/ 33.5	3	36.8/43.	4	39.4/ 45.4	48.3/ 56.5	51.3/	/59.5
Liquid pipe diameter	inches		7/4"							3/	8"		
Suction pipe diameter	inches		3/8" 1/2"					5/8"					
External static pressure (standard/max.)	Pa				20/	200					20/	180	

## + PRODUCT

- RWV05 remote control included (see page 61)
- New motovenilateur DC Inverter
- Integrated condensates pump
- Wide power range
- Extra-slim unit 250 mm
- Adjustable static pressure from 20 to 200 Pa
- Dry contact available



## **FEATURES**

### **TECHNOLOGY**



## AIR QUALITY / CLEAN



#### **FUNCTIONS USERS**









**INSTALLER FUNCTIONS** 







## VRF Indoor units

# **DVHA**

# Ducted high static pressure



RWV05 included

88.1

## + PRODUCT

- RWV05 remote control included (see page 61)
- High static pressure and airflow 4050 m<sup>3</sup>/h
- High power from 5.6 to 28 kW
- Dry contact available



## **FEATURES**

### TECHNOLOGY



#### **FUNCTIONS USERS**







### **INSTALLER FUNCTIONS**



## THE **O** «SUSTAINABLE DEVELOPMENT»

> Energy savings (mode locking, setpoint limits).

## THE **O** «USER»

> Static pressure up to 196 Pa to adapt to any type of ventilation network.

## THE **O** «INSTALLER»

> Possible installation on textile duct.

## THE **O** «TECHNOLOGY»

- > Optimal regulation thanks to its electronic expansion valve.
- > Adaptability to the ventilation network thanks to its adjustable static pressure.

## TECHNICAL DATA

INDOOR UNIT		DVHA-280/220N-01M22					
Part number		7VF030006					
Phase		Single phase					
RATED POWER							
Cooling mode	kBtu/h	77.10	95.50				
Cooling Mode	kW	22.60	28.00				
Heating mode	kBtu/h	85.30	108.50				
rieating mode	kW	25.00	31.50				
ELECTRICAL PARAMETERS							
Phase/Voltage/Frequency		1P/220-240V/50-60Hz					
PERFORMANCES							
Airflow (LS/MS/HS)	m³/h	2500/3900/4200	3500/4390/5200				
Sound power level (LS/MS/HS)	dB(A)	47/51/55	54/58/62				
INSTALLATION							
External dimensions (WxHxD)	mm	1330x50	00x895				
Shipping dimensions (WxHxD)	mm	1590x69	90x1087				
Net weight/Gross weight	kg	103/146					
Liquid pipe diameter	inches	1/2"					
Suction pipe diameter	inches	7/8"					
External static pressure (standard/max.)	Pa	100/	250				

# **DVFA** Ducted high static pressure Fresh Air





RWV05 included

## THE **O** «USER»

> 100% fresh air inlet.

## THE **O** «INSTALLER»

> Installation compatible to all types of ducting network.

## THE **O** «TECHNOLOGY»

> Adaptability to the ventilation network thanks to its adjustable static pressure.

## **TECHNICAL DATA**

INDOOR UNIT		DVFA-140N-01M22	DVFA-280/220N-01M22			
Part number		7VF030002	7VF0	30001		
Phase		Single phase	Single phase			
RATED POWER						
Capacity	HP	6.00	9.00	12.00		
Cooling mode	kBtu/h	47.70	77.10	95.50		
Cooming mode	kW	14.00	22.60	28.00		
Heating mode	kBtu/h	30.40	51.80	60.80		
Treating mode	kW	8.90	15.20	17.80		
ELECTRICAL PARAMETERS						
Phase/Voltage/Frequency			1P/220-240V/50-60Hz			
PERFORMANCES						
Airflow (LS/MS/HS)	m³/h	1070/1460/2600	1320/1900/2300	1820/2400/2800		
Sound pressure (LS/MS/HS)	dB(A)	42/47/48	50/52/55	52/54/55		
Sound power level (LS/MS/HS)	dB(A)	56/60/61	60/65/68	62/66/68		
External static pressure (standard/max.)	Pa	100/185	100/	200		
Air return dimensions	mm	1100x255	1510	x255		
Air supply dimensions	mm	852x255	1510	x255		
INSTALLATION						
External dimensions (WxHxD)	mm	1355x360x876	1725x360x876			
Shipping dimensions (WxHxD)	mm	1386x418x966	1830x530x990			
Net weight/Gross weight	kg	61/77	120/140			
Liquid pipe diameter	inches	3/8"	3/	8"		
Suction pipe diameter	inches	5/8"	1	"		

## VRF Indoor units



## + PRODUCT

- RWV05 remote control included (see page 61)
- Fresh air inlet
- Adjustable static pressure from 20 to 200 Pa



## **FEATURES**

## **TECHNOLOGY**



#### AIR QUALITY / CLEAN



## **FUNCTIONS USERS**









## VRF <u>Indo</u>or units

# XVVA

## Console





RCV03 included

## + PRODUCT

- RCV03 remote control included (see page 60)
- DC Inverter centrifugal fan
- Compact unit
- Bidirectional airflow
- Dry contact available



RWV05 (optional, see configuration page 61)

## FEATURES

## TECHNOLOGY



### **FUNCTIONS USERS**









## **INSTALLER FUNCTIONS**



## THE **O** «SUSTAINABLE DEVELOPMENT»

> Energy savings (mode locking, setpoint limits).

## THE **O** « USER »

- > New simple and elegant design.
- > Super-quiet unit.
- > Upward and downward blowing for greater comfort.
- > Multiple applications can be connected using the dry contact: room card, presence detector.

## THE **O** «INSTALLER»

- > Very compact.
- > Ideal solution for rooms with low ceilings.

## THE **O** «TECHNOLOGY»

> Optimal regulation thanks to its electronic expansion valve.

## TECHNICAL DATA

INDOOR UNIT		XVVA-050/035/025N-01M22					
Part number		7VF070001					
Phase		Single phase					
RATED POWER							
Cooling mode	kBtu/h	9.50	12.30	17.00			
355	kW	2.80	3.60	5.00			
Heating mode	kBtu/h	10.90	13.60	18.50			
neating mode	kW	3.20	4.00	5.50			
ELECTRICAL PARAMETERS							
Phase/Voltage/Frequency		1P/220-230V/50-60Hz					
PERFORMANCES							
Airflow (VLS/LS/MS/HS/VH)	m³/h	270/310/390/460/540	270/350/420/500/580	270/390/460/540/620			
Sound pressure (VLS/LS/MS/HS/VH)	dB(A)	30/33/38/42/45	30/36/40/44/47	30/38/42/45/48			
Sound power level (VLS/LS/MS/HS/VH)	dB(A)	45/48/52/55/58	47/51/54/57/60	42/48/55/58/61			
INSTALLATION							
External dimensions (WxHxD)	mm		600x700x210				
Shipping dimensions (WxHxD)	mm	695x783x303					
Net weight/Gross weight	kg	15.2/18.7					
Liquid pipe diameter	inches	1/4"					
Suction pipe diameter	inches		1/2"				

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## **VRF** connection with an air handling unit

## + PRODUCT

- Allows the combination of air handling units (AHUs) with the VRF system.
- Compatible with VVFA and VVTA systems (from 4 to 104 HP).
- Five sizes available from 3.5 to 73 kW (1-26 HP).
- The kit includes the regulation part and the EEV part (the regulation part can be remote up to 5 m).
- Possibility of regulation by 0-10V signal from the DDC controller (supplied by the installer).
- Connect up to 4 AHU kits per DRV system for higher battery capacity or to power 4 different AHUs.
- Status outputs available for defrost, alarm, mode, On/Off and compressor status.
- Air handling unit fan control possible from the kit (On/Off and 3 speeds) via 230V outputs to be relayed.







Hospital

# **AHU CONNECTION KIT**

Airwell offers a range of connection kits, to connect VRF outdoor units to an air handling units, alone or with indoor units.

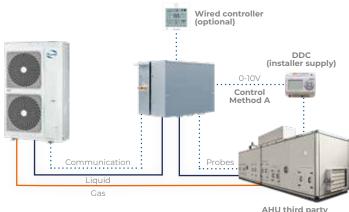
## SYSTEM APPLICATION

- ▶ Offer a solution for large spaces by combining the advantages of VRF with those of central air handling units.
- ▶ Meet the standards of European law: The minimum fresh air renewal is 25 m<sup>3</sup>/h of air per person. So this means that every office, every store and the majority of commercial buildings must be equipped with an AHU to meet the standard. With our AHU kit solution you will meet this requirement and at the same time guarantee a high energy efficiency for heating and cooling production.

## 4 CONTROL MODES AVAILABLE

## CONTROL MODE A

- DDC 0-10V signal output.
- > The AHU kit receives a 0-10V signal to adjust the capacity of the ODU.



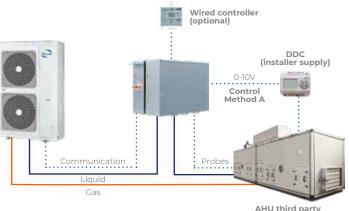
AHU third party (power supply onsite)

Note: The wired remote control is optional.

If the DDC can provide the 0-10V signal, on/off, mode and fan speed via dry contacts to the AHU kit, it is not necessary to connect the wired remote control. Otherwise, the wired remote control is required.

## CONTROL MODE B

- > Control temperature via DDC.
- DDC 0-10V signal output.
- The AHU kit receives a 0-10V signal to adjust the setpoint temperature.

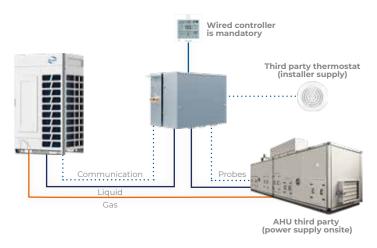


AHU third party (power supply onsite)

Note: The wired remote control is optional. If the DDC can provide the 0-10V signal, on/off, mode and fan speed via dry contacts to the AHU kit, it is not necessary to connect the wired remote control. Otherwise, the wired remote control is required.

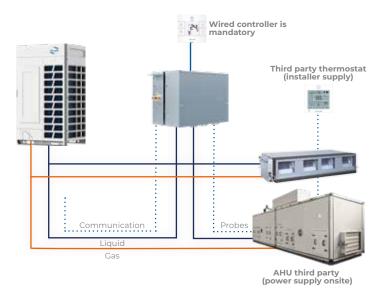
## CONTROL MODE **C** (special application)

- > Without DDC.
- The wired controller is necessary for the selection of the mode and the speed of ventilation but not necessary for the regulation.
- The third-party thermostat provides the On/Off signal to the AHU kit when the set temperature is reached.
- > Applicable for some cases with constant cooling or heating demand and low comfort requirements.



## CONTROL MODE **D**

- > Similar to the original AHU V1.0 kit.
- Control AHU as VRF indoor units with the wired remote control.
- > Return/room temperature control.
- Wired controller is required.
- > Control method for combination of VRF indoor units and AHU system.



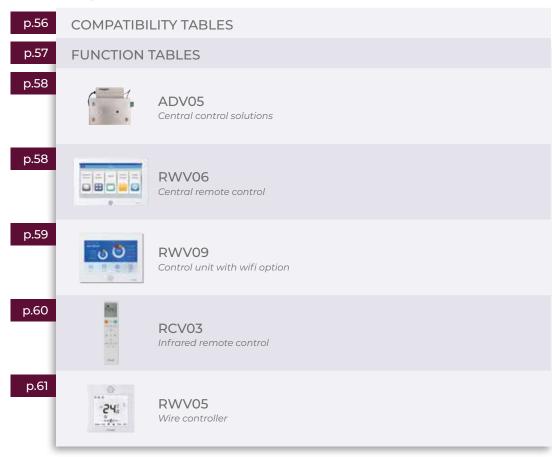
## AHU KITS

MODEL	DESIGNATION	PART NUMBER
AHU kit 7	• AHU kit <7 kW	7ACELH033
AHU kit 14	• AHU kit 7 kW to 14 kW	7ACELH034
AHU kit 28	• AHU kit 14 kW to 28 kW	7ACELH035
AHU kit 56	• AHU kit 28 kW to 56 kW	7ACELH036
AHU kit 73	• AHU kit 56 kW to 73 kW	7ACELH037

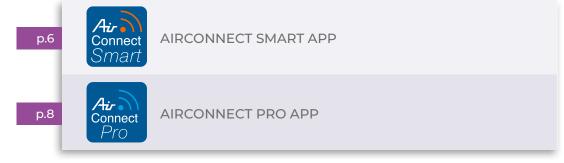


# CONTROL SYSTEMS Range

## MODEL



## **VOIR AUSSI**



# **COMPATIBILITY TABLES**

VRF

MODEL	WIRED REMOTE CONTROL						
REFERENCE	RWV03	RWV05	RWV06	RWV09			
Part number	7ACELH032	7ACELH039	7ACELH023	7ACELH038			
Picture	# 124 E			00			
HVVA	•	•	•	•			
CVQA	•	•	•	•			
CVTA	•	•	•	•			
FVVA	•	•	•	•			
DVLA	•	•	•	•			
DVMA	•	•	•	•			
DVHA	•	•	•	•			
XVVA		•	•	•			

• Standard remote

Optional remote

# **FUNCTION TABLES**

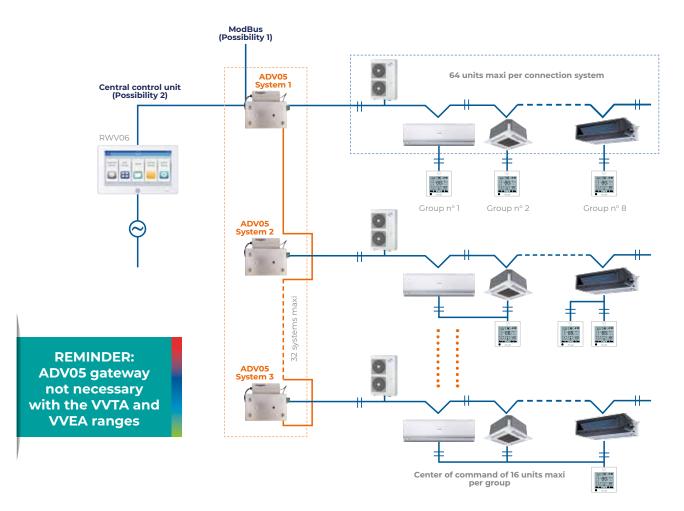
## VRF

MODEL	WIRED REMOTE CONTROL							
REFERENCE	RWV03	RWV05	RWV06	RWV09				
Part number	7ACELH032	7ACELH039	7ACELH023	7ACELH038				
Picture	24	-24:		-00				
USUER FUNCTIONS								
On/Off timer	•	•	•	•				
Weekly timer			•	•				
Silent mode/low speed fan	•	•	•	•				
"I Feel" function		•						
Clean-up function	•	•						
Night mode (economy mode)		•						
Remote locking		•	•	•				
Turbo mode								
"Follow me" function (presence detector)								
Low battery	•	•	•	•				
WiFi compatibility				•				
INSTALLER FUNCTIONS								
Technician test mode								
Group control	•	•	•	•				
Centralized control			•	•				
Heating mode only		•	•	•				
Operating fault display	•	•	•	•				

## ADV05

## Solution de gestion centralisée

# Only one gateway: CENTRAL CONTROL OR MODBUS



TOUCH SCREEN CENTRAL REMOTE CONTROL RWV06 (up to 256 indoor units)



## This command allows you to control and monitor the status of indoor units:

- > Modern design.
- > Intuitive and simple operation thanks to its 7" touch screen.
- > Controls until 64 indoor units by system and 256 indoor units by central control.
- > Can monitors until 32 systems.

## The main functions are:

- > Reading operating parameters.
- > Visualization of error codes.
- > Weekly time: mode, fan speed, temperature.
- > Sets LIFO (last enter have high priority).
- > Creation and monitoring zones.
- > ModBus RS485 -+.

**PART NUMBER: 7ACELH023** 

## CONTROL UNIT **RWV09** (up to 64 indoor units)



## This command allows you to check the status of the indoor units and control them remotely!

- > WiFi included in the control unit.
- > Natively compatible with the AirConnect Smart app.
- Clean and modern design.
- > 5 inches TFT LCD touchscreen with backlight.
- > Control up to 64 indoor units per system and per control unit.
- > The controller can be connected directly to VVTA and VVEA systems.
- > Possibility to connect up to 32 systems. Eco, Cool only / Heat only can be configured according to actual needs.

#### Main features:

- > Reading and operating parameters.
- History and display of error codes.
- The weekly timer for some or all of the units can be set only once, except for the date or the duty cycle. Editing indoor unit information.
- Modbus RTU signal output: can be combined with a WiFi module or a third-party device.



## Control systems

# RCV03

# Infrared remote control



## FUNCTIONS

MODEL		RCV03
Part number		7ACELH045
On/Off		•
	• Auto	•
	• Cooling	•
Mode	• Heating	•
	Dehumidification	•
	• Ventilation	•
Temperature adjus	stment	•
Ventilation adjustr	nent	•
Quiet		•
Turbo		•
Health		•
Night mode		•
Timer		•
Airflow	Horizontal swing	•
Airnow	Vertical swing	•
Electric heating		•
	• Self-cleaning	•
	• Fresh air	•
	Health airflow	•
Menu	• IFP	•
	• Individual shutter control for CFV cassettes	
	Frost protection mode	•
	• C%F°	•
Locking		•
Switch off/on the d	isplay	•
Back lighting		•

## Control systems

# RWV05

## Wire controller

## FUNCTIONS

MODEL		RWV05
Part number		7ACELH039
	• On/off	•
	Adjusting the setpoint temperature	•
Fonction de base	• Fan speed selection	•
	Selecting the operating mode	•
	Airflow adjustment	•
	• Clock	•
Display	Temperature display	•
	Humidity level display	•
	• Individual control: one control per indoor unit	•
	Group control: one command to control up to 16 indoor units	•
Function	• On/off timer	•
Turicuon	<ul> <li>Individual shutter adjustment (for cassette units with 360° rounded corners)</li> </ul>	•
	<ul> <li>Infrared signal receiver: allows the joint use of an infrared control for ducted units</li> </ul>	•
Installation	• Display of error codes	•
IIIStallatiON	Static pressure adjustment for ducted units	•



# Controller receiver and BMS accessories

ACCESSORY	РНОТО	PART NUMBER	MODEL	FUNCTION	FOR WHAT UNITS?	OPTION/COM- MENT
INFRARED CONTROL	LER RECEIVER					
INFRARED CONTROLLER RECEIVER		7ACELH009	REC01	Realize infrared control.	• Ducted	
BMS SOLUTIONS & N	MAINTENANCE					
CENTRAL CONTROLLER GATEWAY AND MODBUS/ RTU		7ACELH027	ADV05	• RWV06 and RWV09 adaptor and ModBus/ RTU gateway.	• VVFA	See configuration page 61
MAINTENANCE TOOL	11	7ACELH014	TD02	Working parameters monitoring and recording tool.	• VVFA • VVTA • VVEA	

# Installation accessories

ACCESSORY	REFERENCE	PICTURE	PART NUMBER	FUNCTION
COPPER				
	1/4"-3/8" - 10ml		7ACFH0810	
	1/4"-1/2" - 10ml		7ACFH0811	
INSULATED	3/8"-5/8" - 10ml		7ACFH0812	Refrigerant tubing to connect outdoor unit with
COPPER MI	1/4"-3/8" - 7ml	1/1/	7ACFH0813	indoor unit (monosplit and multisplit).
	1/4"-1/2" - 7ml		7ACFH0814	
	3/8"-5/8" - 7ml		7ACFH0815	
OUTDOOR UNIT BRACKETS				
WALL BRACKET	Max. load 160 kg Horiz. 560 mm Vert. 365 mm Barre 800 mm	Tel	7ACTL0506	Bracket for outdoor unit installation (monosplit and multisplit).
ANTI-CORROSIONWALL BRACKET	Max. load 160 kg Horiz. 460 mm Vert. 410 mm Barre 790 mm	J	7ACTL0507	Bracket for outdoor unit installation (monosplit and multisplit).
4 ANTI-VIBRATION PADS (KIT)		4.4	7ACTL0508	Ideal for limiting noise and vibrations (good neighborhood).
FLOOR MOUNT	Length 600 mm		7ACTL0509	Necessary for a professional
RECYCLED RUBBER (PAIR)	Length 1000 mm		7ACTL0510	installation.  • High quality: using rubber.
FLOOR MOUNT (PAIR)	450x100 mm		7ACTL0513	<ul> <li>Necessary for a professional installation.</li> <li>Good quality price ratio: using PVC.</li> </ul>

# Installation accessories

ACCESSORY	REFERENCE	PICTURE	PART NUMBER	FUNCTION	
VRF FRAME					
VRF FRAME 4 FEET	Max. charge 500 kg 1000x1200 mm		7ACTL0514	Available for all VRF outdoor unit range.	
VRF FRAME 6 FEET	Max. charge 1040 kg 2000x1200 mm		7ACTL0515	Available for all VRF outdoor unit range.	
VRF EXTENSION 2 FEET	Max. charge 500 kg 1000x1200 mm		7ACTL0516	Available for all VRF outdoor unit range.	
CONDENSATE PUMP					
CONDENSATE PUMP MINI FLC		7ACTL0517	Evacuates condensates from indoor units.		
CONDENSATE PUMP FLOWATO	CHDESIGN		7ACTL0518	Evacuates condensates from indoor units.	



## CALCULATION EXAMPLE

Classic case of a hotel, i.e. a category "A" building.

## THE PROJECT/EXAMPLE CHARACTERISTICS **ARE:**

- ► Typical 2-3\* hotel.
- ▶ DRV system designed to supply 12 to 16 rooms.
- ▶ Outdoor unit model 280 (10 HP).
- ▶ Reversible VRF that can supply up to 16 units.
- ▶ 11 kg of R410A refrigerant recommended.
- ► Smaller bedroom, bathroom included:  $13 \text{ m}^2 > \text{volume} = 32.50 \text{ m}^3.$
- ► CMV ventilation of 60 m³/h, i.e. 10 m³ in 10 minutes.

#### THIS GIVES THE FOLLOWING CALCULATION:

- ▶ Room volume to take into account: 32.50 + 10 = 42.50 m<sup>3</sup>.
- ► MAXIMUM LOAD UNDER THE STANDARD:  $0.44 \text{ kg/m}^3 \times 42.5 \text{ m}^3 = 18.7 \text{ kg of refrigerant}$
- ▶ Since the calculation is determined for the room with the smallest volume, the total refrigerant capacity of the installation must be taken into account:
  - Outdoor unit (11 kg) + network backup.
  - The network back-up is calculated according to the lengths and diameters of the copper piping used. See refrigeration diagram.
- ► MAXIMUM PROJECT LOAD CALCULATION: 11 kg + (4.520 kg) = 15.520 kg of refrigerant

**COMPLIANT WITH REGULATIONS** 

# Measurement units conversion

# MEASURE UNITS Conversion

LENGTH				
1 inch (in)	0. 0254 m			
1 foot (ft)	12 inches	0.3048 m		
1 yard (yd)	3 feet	0.9143 m		
1 mile (mi)	1.760 yards	1609 m		
1 nautical mile (nmi)	1852 m			
1 meter (m)	39.37 inches	3.28084 feet	1.09361 yard	

MM	INCHES
6.35	1/4
9.52	3/8
12.70	1/2
15.88	5/8
19.05	3/4
22.22	7/8
25.40	1
28.58	1"1/8
31.75	1"1/4
38.10	1"1/2

VOLUME					
1 cubic inch (cu in)	16.387064 cm <sup>3</sup>				
1 cubic foot (cu ft)	0.028317 m <sup>3</sup> /28.31685 dm <sup>3</sup>				
1 cubic yard (cu yd)	0.76455 m <sup>3</sup>				
1 pint	0.568				
1 gallon-imp	4.546				
1 gallon (US gal)	3.78541 l or dm <sup>3</sup>				
1 cubic meter (m³)	35.31467 cu ft				
1 cubic decimeter (dm³)	0.26428 gal				
1 liter (I)	1 dm <sup>3</sup>				

HP (HORSE POWER) *	вти	KW
1	9000	2.637
1.5	12000	3.516
2	18000	5.274
2.5	24000	7.032
3	30000	8.79
5	45000	13.185

MASS VOLUME					
1 cu.ft/lb	62.43 dm³/kg				
1 US gallon/pound	8.3 dm <sup>3</sup> /kg				

DEN	SITY
1 pound/cu.ft	0.016 kg/dm <sup>3</sup>

MASS					
1 ounce (oz)	28.349 g				
1 pound (lb)	16 oz	0.4536 kg			
1 quintal U.S	100 lbs				
1 centweight	112 lbs				
1 short ton (US)	2000 lbs	907.18 kg			
1 long ton (GB)	2240 lbs	1016.04 kg			
1 quintal (q)	100 kg				
1 tonne (t)	1000 kg				

AREA					
1 square inch (in2)	6.4516 cm <sup>2</sup>				
1 square foot (ft2)	0.0929 m <sup>2</sup>				
1 square yard (yd2)	0.8361 m <sup>2</sup>				
1 square meter (m²)	1550 in <sup>2</sup>	10.76391 ft <sup>2</sup>			

ENERGY - HEAT QUANTITY					
1 cal	4.18 joules				
1 Btu	0.252 kcal	1055 joules			
1 Btu/lb.°F	1 kcal/kg °C				
1 kcal	1 millithermie				
1 fg/h	-1 kcal/h				
1 kcal/h	1.163 W				
1 Btu/h	0.293 W				
1 ton (US)	3024 kcal/h	3512 W			
1 ton (GB)	3340 kcal/h	3878 W			
1 watt (thermic)	0.86 kcal/h				

 $<sup>^{\</sup>circ}$  Fahrenheit =  $^{\circ}$ C x 9/5 + 32 /  $^{\circ}$  Celsius = ( $^{\circ}$ F-32) x 5/9 /  $^{\circ}$  Celsius = T (Kelvin) - 273.15. \* Indicative values

Rated capacities of our products are given for air conditions as following: Cooling mode:  $35^{\circ}$ C out/ $27^{\circ}$ C in (Dry bulb) Heating mode:  $47^{\circ}$ C out/ $20^{\circ}$ C in (Dry bulb)

# Range developments

# **NEW PRODUCT**

Discover below some tips to decipher our references and product codes more quickly.

## **1 > UNDERSTANDING PRODUCT CODES**

	DIGIT N° 1  DIGIT N° 2 & 3  Product constitution		DIGIT N° 4 & 5 subfamily		
2	AirSolar	VF	VRF	01	Floor ceiling
7	Airwell	OG	Chilled water terminal	02	High wall
Ε	Electra	KT	Kit	03	Ducted
J	Johnson	МВ	Monoblock	04	Cassette
		SP	Split (2 units)	05	Window
		СК	Unassembled product	06	Monosplit condensing unit
		PR	Spare part	07	Console
		EN	Renewable energy	08	Portable
				09	Multisplit condensing unit
				10	Floor standing
				11	Airflow
				12	Rooftop unit
				13	Hydraulic module
				17	Thermodynamic water heater
				18	Vertical cabinet
				14	Monoblock condensing unit
				15	VRF water source
				19	Water source
				20	Water condenser
				21	Water-cooled condensing unit
				22	Hybrid panel
				23	Photovoltaic panel
				24	Heating panel
				25	Micro-inverter

## **2** ► UNDERSTANDING ACCESSORY CODES

	DIGIT N° 1		DIGIT N° 2 & 3		DIGIT N° 4 & 5 (& 6)
7	Airwell assembled product	AC	Accessories	EL	Electricity kit - Heating
				ELH	Electricity kit - Heating / VRF
				FH	Cold & hydraulic kit
				FHH	Cold & hydraulic kit / VRF
				TL	Sheeting Kit / Casing & Metal sheet Kit
				VF	Fan & airflow kit
				VFH	Fan & airflow / VRF kit

## **3** ► UNDERSTANDING SERIAL NUMBERS

Each unit (IDU or ODU) is also identify with a unique serial number which can assist tracing the unit.





# General terms and conditions of sale

#### **ARTICLE 1 - PURPOSE AND SCOPE**

- 1.1. These general terms and conditions of sale apply to all sales of equipment and deliveries of services entered into by Groupe Airwell SA (hereinafter the "Vendor"), a public limited company (société anonyme) with a capital of 217 361 euros whose registered office is located at 10, rue du Fort de Saint Cyr, 78180 Montigny le Bretonneux, France, entered in the Versailles trade and companies register under number 752 800 862 from a professional buyer, understood as any natural or legal person, public or private, who acts for purposes within the framework of his commercial, industrial, craft, liberal or agricultural activity, including when they act in the name and on behalf of another professional. These general terms and conditions of sale are not applicable to a consumer or non-professional buyer.
- **1.2.** "Equipment" refers to finished products, accessories, and spare parts.
- **1.3.** Any order implies full and unconditional acceptance of these general terms and conditions of sale, which prevail over any other document of the buyer, particularly its general terms and conditions of purchase, unless otherwise expressly agreed beforehand by the Vendor.
- **1.4.** If the Vendor does not invoke any clause within the general terms and conditions of sale at a given moment, this may not be interpreted as waiving its rights to invoke such clauses or these general terms and conditions of sale subsequently.

## ARTICLE 2 - GENERAL INFORMATION: CATALOGUES, DOCUMENTATION

- **2.1.** Due to the speed of technological developments and changes to standards or safety improvements in the sector concerned, any information, indication, or item of value transmitted on any medium, whether it comes from the manufacturer or the Vendor, is given for information purposes only. These parties reserve the right to make any modification to the equipment whose prints, photographs, or drawings appear in such documents, at any time and without notice. No document provided by the Vendor is to be considered as a contractual element, and the Vendor cannot be held liable for such documents.
- **2.2.** Where the proposed equipment is selected by the Vendor on the basis of information provided by the informed professional buyer, the buyer is always responsible for ensuring that the characteristics of the equipment proposed by the Vendor are actually suitable for its needs, with regard to both performance and the possibilities of implementation. In addition, if the buyer resorts to hiring the Vendor's engineers or technicians for a study or project, the Vendor may not be held responsible, and the buyer undertakes to consult an expert in the field for, among other things, the selection and sizing of the equipment, as well as its installation and commissioning.
- **2.3.** The buyer must not modify the markings affixed on the equipment or packaging, add any other marking, or use the Vendor's markings, names, or trademarks in any way not expressly authorized.

#### **ARTICLE 3 - ORDERS AND QUOTATIONS**

- **3.1.** Orders are fixed. Once accepted, the order or quotation may only be modified or cancelled by the buyer with the Vendor's prior express consent. The buyer shall be liable for any order cancellation, even partial, and the Vendor shall be entitled to compensation in the form of a penalty set in the amount of the cancelled order, without prejudice to any other damages.
- **3.2.** Any acceptance of an order or quotation must be written. Sales are final only after the express acceptance in the form of the Vendor issuing an acknowledgement of receipt of the buyer's order. The Vendor reserves the right to accept or reject any order within a maximum of five business days from its receipt.
- **3.3.** The buyer must check the acknowledgement of receipt of the order, and report any error or omission to the Vendor within a maximum period of 48 hours from its receipt. Beyond this period, the order becomes final for the buyer. If a buyer places an order with the Vendor, without having paid for its previous order(s), the Vendor may refuse to fulfil the order and deliver the equipment in question, without the buyer being able to claim any compensation for any reason whatsoever.

**3.4.** The Vendor reserves the right, even after partial fulfilment of an order, to require guarantees or to cancel the order(s) or balance of orders in progress in the name of the buyer, without any kind of compensation, in the following cases: deterioration of the buyer's credit, failure to file documents and instruments with the registry of the commercial court, downgrading of the buyer's rating by the Vendor's credit department, refusal of a credit insurer or a factor to cover the amount of the sale, change or modification in the financial or legal capacity of the buyer, listings or liens on the buyer's business or in general, in case of a change in the buyer's situation.

#### **ARTICLE 4 - DELIVERY AND TRANSPORT**

- **4.1.** Unless there are provisions or an agreement to the contrary, the transport/delivery costs are borne by the purchaser. The reference incoterms are FCA purchaser's warehouse or FOB port of shipment from the manufacturing plants.
- **4.2.** The delivery lead times are given for information purposes only. In no case may exceeding the lead times justify the cancellation of the order or the awarding of damages. However, if the equipment still has not been delivered two months after a formal notice has remained unacted on, for any reason other than force majeure (as defined in article 6.2), the order may then be cancelled at the request of either party; the buyer may obtain a refund of its advance payment to the exclusion of any other compensation or damages.
- **4.3.** In accordance with Article 133-3 of the French commercial code, any delivered equipment that was not the subject of reservations by registered letter with acknowledgement of receipt within three days of receipt (not including holidays) to the transporter, a copy of which shall be simultaneously sent to the Vendor, shall be considered accepted by the buyer.

#### **ARTICLE 5 - RECEIPT AND RETURN OF EQUIPMENT**

- **5.1.** Complaints about apparent defects or the non-compliance of the delivered equipment must be expressed in detail on the delivery slip and by registered letter with acknowledgement of receipt, and sent to the Vendor's registered office within 72 hours after delivery. Beyond this period, the received equipment shall be considered compliant with the order. It shall be up to the buyer to provide, with its complaint, any justification as to the reality of the defects or anomalies observed. The buyer shall give the Vendor every opportunity to investigate such defects and find a solution.
- 5.2. In any case, the buyer may not return the equipment without authorization from the Vendor. The Vendor shall be responsible for the costs and risks of the return solely in the event that an apparent defect or missing items are actually noted by it or its representative. If a claim proves justified, the return shall be the subject of an exchange or a credit memo, at the Vendor's choice, without the ability to demand any compensation or damages in any capacity whatsoever. Any return of equipment previously accepted due to the buyer, including but not limited to an order error or incorrect information communicated for a calculation or an order made by the buyer, shall automatically result in a discount of 20% from the amount of the equipment in question excluding taxes, in order to take account of the costs of repackaging and any other charges, including transport, generated by this return. The buyer shall be responsible for the return transport.

#### **ARTICLE 6 - PRICE - PRICELIST AND PRICE REDUCTIONS**

- **6.1.** Unless there are provisions or an agreement to the contrary, prices are set in euros excl. tax and FCA purchaser's warehouse for sales from the seller's stock, or FOB port of shipment from the manufacturing plants. For sales from manufacturing plants, a handling/freight/loading fee of 470 euros per container (regardless of container type) will be charged.
- **6.2.** Equipment is sold based on the Vendor's pricelist still valid on the date of each placed order, or on the date of issue of each quote, subject to delivery occurring no later than the end of the second calendar month following that date. Beyond that period, any price change before delivery shall be automatically applicable.
- **6.3.** No discount shall be applied by the Vendor for cash payment or for payment earlier than the period indicated in these general terms and conditions of sale, or on the invoice issued by the Vendor.

- 6.4. Unless otherwise agreed, the Vendor may grant the buyer discounts on the valid pricelist, including in the form of premiums, at the time when the order is placed, depending on the turnover excluding taxes generated annually or over a given period, and/or the quantity/nature of the purchased finished products and/or services possibly rendered by the buyer. These discounts may be fixed and/or gradual and may vary according to the buyer category.
- **6.5.** If one of the criteria for application of these price reductions or any one of the clauses of these terms and conditions of sale is not met, the cancellation of such price reductions shall be immediately retroactive over the entire year in question. Consequently, if price reductions have already been applied by the Vendor during the year in question, they must be returned by the buyer on simple request.

#### **ARTICLE 7 - PAYMENT TERMS**

- 7.1. For any company based outside France, invoices shall be payable according to the payment period negotiated and agreed by the Vendor. For all French companies, invoices are payable within a maximum period of 45 days, end of month, or 60 days from the invoice issue date. For summarized invoices issued at the end of the month, the period must not exceed 45 days from the invoice issue date (article L. 441-6 of the Code of Commerce).
- 7.2. The Vendor reserves the right to require one or more advance payments when the order is placed and/or before shipment. Any commercial paper (bill of exchange or promissory note) presented for acceptance must be returned within eight clear days of its receipt by the buyer.
- 7.3. In accordance with Articles L. 441-3, L. 441-6, and D. 441-5 of the French commercial code, any payment delay automatically results in, in addition to late payment penalties at a rate equal to three times the statutory interest rate (i.e., 3.12% in the first half of 2022 updated each half-year period by the Minister of the Economy, with the understanding that this rate shall apply to the amount of the invoice including all taxes), an obligation for the debtor to pay 40 euros in recovery charges if the invoice has not been settled on the day following the payment date appearing on the invoice. In addition, in case of a late payment or a partial payment, (i) the Vendor may suspend all current and/or future orders; (ii) 48 hours after a formal notice has remained unacted on, the sale shall be automatically terminated, if so desired by the Vendor, which may move for summary proceedings for the return of the equipment, without prejudice to any other action and/or damages. The buyer must reimburse all costs caused by the non-payment (including return costs on unpaid debts) and the recovery of sums due, including fees of ministerial officers and/or recovery companies.
- 7.4. By no means may payments be suspended or offset without the Vendor's prior written approval. Any partial payment shall first be applied to the non-preferential part of the debt, then on the amounts with the earliest due date.

#### **ARTICLE 8 - RETENTION OF TITLE AND TRANSFER OF RISKS**

- 8.1. The transfer of ownership of the equipment is subject to the full payment of the price by the buyer. The buyer undertakes to maintain the equipment in good condition and insure it against all risks, for which the buyer shall be fully liable in all cases, as from their delivery. In order to permit any action for recovery by the Vendor, the buyer must ensure that the equipment can be individually identified.
- **8.2.** The Vendor may recover its equipment regardless of whose possession it is in, in case of non-payment of the price by the buyer or insolvency thereof, even when such equipment has been handed over to a third party. If the equipment was resold, the buyer must notify the new buyer of the existence of the retention of title clause

## **ARTICLE 9 - LOCAL STANDARDS AND COMPLIANCE**

**9.1.** As concerns European countries subject to the FGAS EU517/2014 regulation, the importer of the products bears sole liability to the European authorities for the declaration of the FGAS quotas. Therefore, for orders from Airwell's central stock located in France, the FGAS quotas are declared by Airwell; no further action is to be taken by Airwell customers. For drop-shipped orders, imported directly from plants outside of Europe, the Airwell customer importing this order bears sole liability for the declaration of the FGAS quotas to the relevant authorities. The latter must complete the declaration paperwork in its own country. Airwell may, at the customer's request, sell and transfer FGAS quotas but Airwell shall not be held liable under any circumstances for a failure to declare quotas or any error in the quantities declared. The importing customer bears sole liability for the declaration of FGAS quotas.

9.2. Any entry of goods into the European Union or a third country is the sole responsibility of the importer. In this sense, the buyer is solely responsible for ensuring the conformity of the products it imports. Airwell cannot be held responsible if the products do not comply with the local standards when they enter the "destination" territory (release for consumption). The buyer must provide in advance all the documents necessary for the compliance of the imported products in the "destination" territory (release for consumption). Airwell strongly recommends a pre-departure inspection of the goods, at the customer's (buyer's) expense, to ensure the compliance of the imported goods. After research and analysis, Airwell reserves the right to refuse the order or to modify the pricing.

#### ARTICLE 10 - ASSIGNMENT OF JURISDICTION - APPLICABLE LAW

These general terms and conditions of sale are subject to French law. Any dispute shall be under the exclusive jurisdiction of the VERSAILLES COMMERCIAL COURT, even in case of interim proceedings, incidental claims, or multiple defendants or introduction of third parties.

#### **ARTICLE 11 - INTELLECTUAL PROPERTY**

- 11.1. The buyer is authorized, on a precarious basis, to use the brand, the commercial name, the sign, the graphic elements and other distinctive signs relating to the Vendor's equipment for the sole purpose of identifying and promoting them and in the exclusive interest of the Vendor. This right of use does not confer any ownership rights to the buyer. The buyer undertakes not to register and not to be the owner of trademarks, models, domain names, patents, signs, trade names, product references and other distinctive signs belonging to the Vendor (or of which it has the use) or which could lead to confusion with its own.
- 11.2. With regard to the Vendor's graphic elements, such as logos or photographs, the buyer undertakes to use and reproduce them only in strict compliance with the quality of the image and the format of the original graphic elements. The buyer shall not modify them or use them in such a way as to degrade the brand image of the Vendor or those image of the Vendor or of his equipment.
- 11.3. The buyer's right to use the Vendor's trademarks, trade names or other distinctive signs shall cease immediately when the business relationship with the Vendor ceases for any reason whatsoever. Same applies to non-compliance by the buyer with the conditions of use described in this article may result in the termination of this right of use at any time by simple letter.

## ARTICLE 12 - PRIVACY POLICY

- 12.1. Any order for equipment implies the processing, by the Vendor, of personal data within the meaning of European Regulation 2016/679 of 27 April 2016 and Law No. 78-17 of 6 January 1978 relating to data processing, files and freedoms in its current version (hereinafter collectively the "Applicable Laws"), which relate to the buyer and/or the natural person. representative of the buyer, who places the order in the name and on behalf of the buyer.
- 12.2. The Vendor declares that it complies with the Applicable Laws and, in particular, implements the principles of personal data protection, notably the principles of lawfulness, proportionality, transparency and data minimization as set forth in the Applicable Laws.
- 12.3. The manner in which such data is collected and processed by the Vendor, as well as a description of the buyer's rights with respect to such data, are set out in the privacy policy adopted by the Vendor and available on its website at the URL https:// www.airwell.com/en/privacy-policy/.
- 12.4. The Vendor's privacy policy is an integral part of these terms and conditions of sale.

THESE GENERAL TERMS AND CONDITIONS MAY BE SENT TO YOU IMMEDIATELY IN LARGE PRINT ON SIMPLE REQUEST. AS THESE TERMS AND CONDITIONS ARE ESSENTIAL TO THE VENDOR'S COMMITMENT, WE INVITE YOU TO CONTACT US IF THEIR READABILITY IS NOT SUITABLE FOR YOU.





## **TECHNOLOGY**



#### FLEXY MATCH

Indoor units are compatible with monosplit or multisplit installation.



#### DC INVERTER

Compressor with high efficiency DC engine.



R410A FLUID



## ELECTRONIC EXPANSION VALVE

Precise control of refrigerant flow, optimized of performance and compressor protection.



#### **4D AIRFLOW**

Optimized heating and cooling operations, with an automatic horizontal and vertical swing.



#### **MULTIFLOW 360°**

4-direction air distribution system with great comfort through 360 , with motorized opening control



## BLUE FIN TRAITEMENT

Protection of exchangers against corrosion while improving heat transfer.

## AIR QUALITY/CLEAN



#### FRESH AIR

Cools the room by bringing fresh air from outside.

## **USER FUNCTIONS**



Precise temperature control all around the chosen zone via a remote temperature sensor.



#### **PROGRAMMABLE TIMER**

Timer set to switch the unit on and off.



## (MEMORY)

Automatically restarts the unit in the last used mode when power is restored.

## **INSTALLER FUNCTIONS**



#### ERROR CODE VIA INDOOR UNIT

Digital display of error codes or temperature settings on the indoor unit.



## SELF-DIAGNOSTIC

Unit failure indicated by a blinking led on the unit display.



#### INTEGRATED CONDENSATES PUMP

Eliminates condensate, for a simple and smooth running.



## DRY CONTACT ON/OFF

Connection to a detection accessory (room card, presence detector, window...) to make energy savings.



## BMS COMPATIBLE

Connection to the BMS system.



## SERVICE MONITOR

TOOL

Local interface for monitoring the operating parameters.

# AS PART OF ITS INVOLVEMENT IN THE ENERGY TRANSITION AIRWELL HAS IMPLEMENTED THE



# TECHNICAL & QUALIFICATION TRAINING

to allow maintenance technicians, installers and distributors to develop their knowledge and offer them an energy management system that is both essential for their activity but also for the planet!







Read more about training at: www.airwell-academy.fr

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**TECHNICAL SUPPORT** 

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