Airwell

FRENCH BRAND

VRF RANGE

VARIABLE REFRIGERANT FLOW SOLUTIONS

EUROPE 2023/2024

OUR MOST
BEAUTIFUL ENERGY
STORY IS YOU

YOUR FRENCH REFERENCE
for over 75 years

Airwell, a French thermal equipment manufacturer committed to the energy transition

A French referenced brand for professionals

As an expert and creator of climate and thermal solutions, Airwell's mission is to create and cultivate well-being. Airwell is committed to:

Reinventing uses
→ To limit our environmental footprint.

Optimising consumption
→ To consume less and better.

Promoting solar energy
→ To preserve natural resources.

Historical French manufacturer

1947	Creation of the Airwell Group, the French pioneer in heat pumps.
1970	Airwell becomes the leading European heat pump manufacturer. Leader in Europe and Africa.
2008	Industrial disengagement and restructuring of the Airwell Group.
2014	Launch of the Airwell 2.0 strategic project (the transformation from a heat pump manufacturer to a solution provider).
2020	Launch of Hybrid House, AirConnect Pro and Leezy.
2021	Airwell becomes Airwell Group following the acquisition of Airwell Residential by Airwell Distribution.
2022	Integration of the CSR approach into the strategy and award of the "Innovative Company" label by BPI France.

GROUPE AIRWELL

72
employees

200+
business partners

70+
service partners

Airwell operates in
80
countries

INNOVATION · SERENITY · COMFORT
LISTENING · COMMITMENT

Airwell manifesto

A vision for the future.

This is how Airwell was born in 1947. With the crazy idea of bringing innovative solutions from the United States that did not yet exist in Europe: air conditioning.

Today, innovation is more than ever at the heart of Airwell, as we have become leaders in the creation of thermal and climatic solutions. A deeply human innovation, listening to consumers.

Just like the family spirit that defines Airwell, based on wellbeing and respect for everyone's expectations.

Optimising our energy consumption, favouring solar energy to preserve our natural resources, reinventing consumer uses to limit our environmental footprint, cultivating the comfort of each interior...

At Airwell, we are committed to this for the well-being of everyone and the eenvironment.

"What was our ambition became our mission."

Yes, energy solutions must be intuitive in their management and use.

Yes, they must reduce the ecological and economic impact of housing.

Yes, the world of tomorrow must be built around a single principle: the serenity of each individual.

"And we are convinced of this."

Our most beautiful energy story is you.

WANT TO INVEST AND BECOME A CONTRIBUTOR IN THE ENERGY TRANSITION?

A propitious context:

- Airwell, the French reference for heat pumps
- A market driven by new environmental standards
- A CSR approach at the heart of Airwell
- A strategy of conquest driven by the new management
- Airwell, French expert and manufacturer since 1947
- Innovative energy-efficient solutions

I BECOME A SHAREHOLDER

All the steps are detailed on our website:

https://groupe-airwell.com/en/become-a-shareholder/

SMART BUILDING
Solutions

MODEL

AIRCONNECT SMART

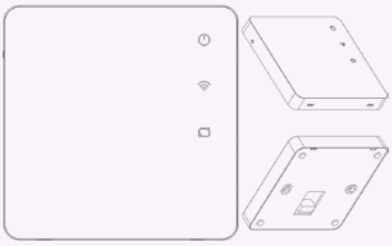
The FlowLogic VRF system can be remotely controlled by the intelligent Wi-Fi module and controlled by the AirConnect Smart application.

1. 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 Wi-Fi 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 WI-FI MODULE:

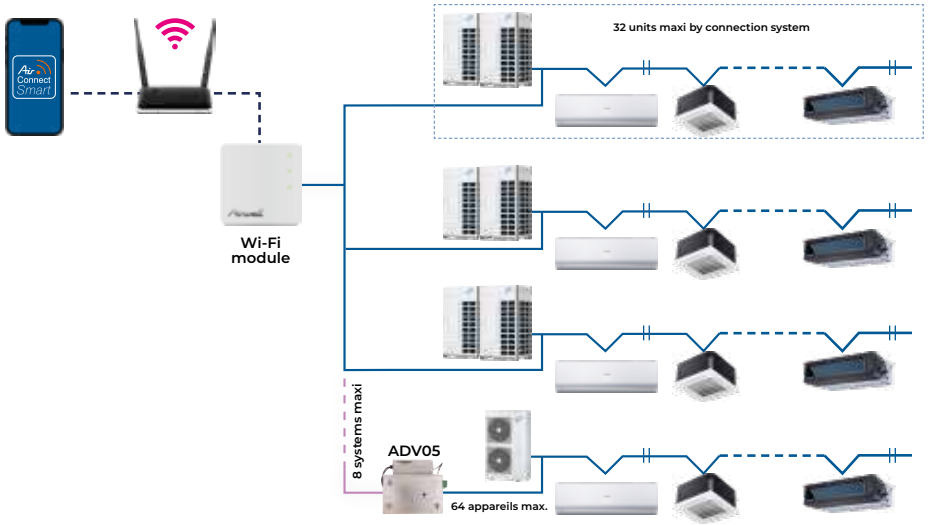
- Part number: 7ACEL1869



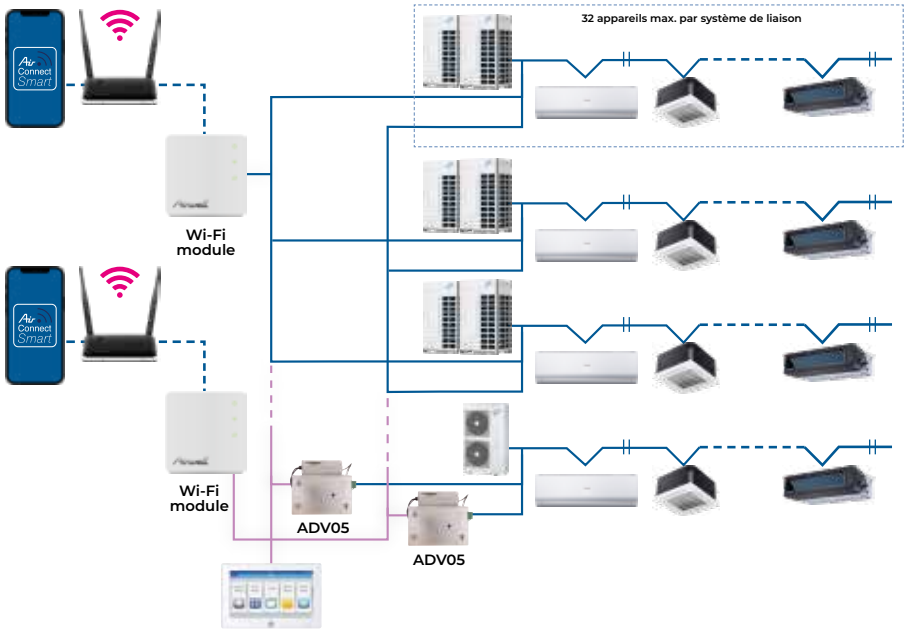
- **Dimension du module:** 86x86x12 mm
- **Models compatibles:** VVFA, VVTA, VVEA

INSTALLATION METHOD

- Thanks to Airwell Wi-Fi 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 Wi-Fi module.



AIRCONNECT PRO

Global solution

THE CONTROL AND PREVENTIVE MAINTENANCE OF VRF INSTALLATIONS

accessible on smartphone, tablet* or computer

www.airconnectpro.com

* For the Control App.

Télécharger dans l'App Store

DISPONIBLE SUR Google play

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 AirConnectPro, 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 SERVICE:

- **CONTROL APP :** control of indoor units
- **SERVICE APP :** diagnostic and preventive maintenance
- **MANAGEMENT APP:** energy metering and optimization
- **FULL APP :** SERVICE APP + MANAGEMENT APP

CONTROL APP (CONTROL OF INDOOR UNITS)	• *Unique solution for remote control of indoor units* • *Management of modes, setpoint temperatures, fan speed* • *"Weekly schedule" programming without rule limitation* • *Creation of control zones allowing energy savings*
SERVICE APP (DIAGNOSIS AND PREVENTIVE MAINTENANCE)	• *The ONLY preventive remote maintenance solution on the market: Prevent a breakdown before it happens!* • *Remote visualization of all the parameters of the installations* • *VRF and diagnosis in one click* • *Recording of all the data allowing a complete history of history of operation* • *Management and follow-up of alerts to designated technicians*
MANAGEMENT APP (METERING AND ENERGY OPTIMIZATION)	• *The most reliable and accurate energy metering solution on the market. With the addition of a Modbus MID meter (supplied by the installer), our solution allows the break down of the total energy consumption by indoor unit operation ratio and parameters.* • *Division of the global consumption by indoor unit or by zone* • *Energy audit of the installation allowing energy savings* • *Comparison of consumption by system or by site in order to optimize the operation of the machines and reduce energy costs*

AIRCONNECT PRO SUBSCRIPTION CONFIGURATOR						
Designation		**Part number**	**CONTROL APP**	**MANAGEMENT APP**	**SERVICE APP**	**FULL APP**
One-time purchase	**AirConnect Pro cloud box**	SO3199999	✓	✓	✓	✓
	CONTROL APP licence (lifetime)	SO3299999	✓	✓	✓	✓
Annual subscription	**MANAGEMENT APP licence**	SO34120xx		✓		
	SERVICE APP licence	SO33120xx			✓	
	FULL APP licence	SO35120xx				✓

xx= power system

COMMERCIAL & INDUSTRIAL *Ranges*

THE AIRWELL VRF SOLUTION

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 times.

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 1500 hours and reinforced anti-corrosion treatment on request to meet the most demanding constraints.

THE AIRWELL VRF SOLUTION

FlowLogic V

OUTDOOR UNIT MODELS		REFRIGERANT TYPE	CAPACITY (HP)	COOLING CAPACITY (KW)	HEATING CAPACITY (KW)
p.13 VVFA - 2-PIPES - FRONT DISCHARGE					
	VVFA-125R	R410A	4	12.10	14.20
	VVFA-150R		6	15.50	18.00
	VVFA-220R		8	22.60	22.60
	VVFA-280R		10	28.00	30.50
	VVFA-335R		12	31.50	31.50
p.16 VVTA - 2-PIPES - TOP DISCHARGE					
	VVTA-250R	R410A	8	25.20	25.20
	VVTA-280R		10	28.00	28.00
	VVTA-335R		12	33.50	33.50
	VVTA-400R		14	40.00	40.00
	VVTA-450R		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
	VVTA-735R		26	73.50	73.50
p.26 VVEA - 3-PIPES - TOP DISCHARGE					
	VVEA-250R	R410A	8	22.40	22.40
	VVEA-280R		10	28.00	28.00
	VVEA-335R		12	33.50	33.50
	VVEA-400R		14	40.00	40.00
	VVEA-450R		16	45.00	45.00
	VVEA-504R		18	50.40	50.40
	VVEA-560R		20	56.00	56.00
	VVEA-615R		22	61.50	61.50
p.36 WATER FLOWLOGIC					
	VVWO-220R	R410A	8	22.40	25.00
	VVWO-280R		10	28.00	31.50
	VVWO-335R		12	33.50	37.50

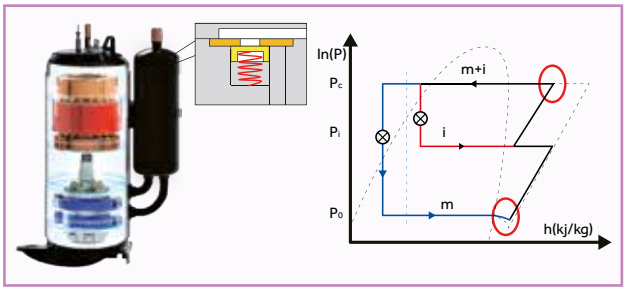
VVFA

Compact VRF Range

Our range of compact VRFs adapts perfectly to any type of installation, commercial 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

▶ Charging valve

▶ Eurovent certified

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

▶ Nsc up to 337% or SEER 8.5

COMPATIBLE Air Connect Pro

COMPATIBLE Air Connect Smart

FlowLogic V

COMPATIBLE Air Connect Pro

COMPATIBLE Air Connect Smart

VVFA

2-pipes - Front discharge system

+ PRODUCT

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

RWV06 (optional, see configuration page 58)

RWV09 (optional, see configuration page 59)

FEATURES

TECHNOLOGY

DC INVERTER

BLUE FIN TREATMENT

INSTALLER FUNCTIONS

SELF DIAGNOSTIC

BMS COMPATIBLE

SERVICE MONITOR TOOL

CERTIFICATION

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

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

- All models are Eurovent certified, except VVFA080.

THE ⊕ "SUSTAINABLE DEVELOPMENT"

> Low consumption and optimized regulation for greater energy savings.

THE ⊕ "USER"

> Mode locking.
> Centralised management.

THE ⊕ "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 maintenance.

THE ⊕ "TECHNOLOGY"

> Up to 16 indoor units, performance certified by Eurovent* (8,10,12 HP).
> Compatible with AirConnect Pro and AirConnect Smart.

High efficiency DC fan motor: DC fan motor with stepless inverter control, efficiency increased by 45% compared with AC motor and power input.

High efficiency condenser: Ø8 inner grooved pipe; hydrophilic corrugated fissure fin.

Large diameter fan: 570 mm big diameter axial flow fan; zigzag design, reduce airflow disturbance, air volume is bigger, the noise is lower.

10-12 HP

Vector inverter control: 180 degrees sine wave vector control, 64-bit operation; high precision control, to achieve high efficiency and lower noise.

Double pressure sensor: equipped with high and low voltage; pressure double sensors; accurate pressure control, the system runs more smoothly, and is more energy efficient.

Twin rotary DCI compressor: high chamber DC Inverter twin rotary compressor; small vibration, low noise, high energy efficiency.

See technical draws page 62

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 MODE								
Rated power*		**kW**	**12.10**	**15.50**	**15.50**	**22.60**	**28.00**	**31.50**
Rated power input		kW	3.61	5.17	5.17	6.95	8.67	11.52
Rated current		A	17.28	24.72	8.26	11.42	14.24	19.03
Max. current		A	34.10	36.90	12.30	19.00	23.80	25.40
EER			3.35	3.00	3.00	3.25	3.23	2.73
SEER			6.82	6.80	6.80	7.67	7.65	7.47
Seasonal operating limits		%	269.80	269.00	269.00	303.80	303.00	295.80
HEATING MODE								
Rated power*		**kW**	**14.20**	**18.00**	**15.50**	**22.60**	**30.50**	**31.50**
Rated power input		kW	3.23	5.00	5.00	5.79	8.03	8.49
Rated current		A	15.44	23.92	8.00	9.52	13.18	14.02
Max. current		A	32.70	35.50	11.90	18.00	22.60	24.20
COP			3.75	3.10	3.10	3.90	3.80	3.71
SCOP*			4.05	4.05	4.05	4.05	4.16	4.21
Seasonal operating limits		%	159.00	159.00	159.00	159.00	163.40	165.40
POWER SUPPLY								
Phase/Voltage/Frequency			1P/220-240V/50-60Hz		3P/380-415V/50-60Hz			
PERFORMANCE								
Airflow (HS)		m^3/h	7200			10000		
Sound pressure	Cooling mode	dB(A)	57	59	59	63	64	65
	Heating mode	dB(A)	57	59	59	65	66	67
INSTALLATION								
Outline dimensions (WxHxD)		mm	950x1350x370			1050x1636x400		
Package dimensions (WxHxD)		mm	1023x1420x471			1150x1790x510		
Net weight/Gross weight		kg	108/123			149/168		
Compressor	Type		Scroll DCI			Twin rotary DCI		
	Engine power	W	Mitsubishi Electric					
	Number of compressors		1					
Refrigerant/GWP			**R410A/2088**					
Charge		kg	4.00			5.10		
Liquid pipe diameter		inches	3/8"			3/8"		1/2"
Suction pipe diameter		inches	5/8"			3/4"	7/8"	1"1/8
Max. length		m	300					
Max. length (equivalent/actual)		m	175/150					
Max. height between indoor and oudoor units		m	50					
Max. height between indoor units		m	15					
Indoor/outdoor unit power ratio (min./max.)		%	50~130					
Maximum number of connectable indoor units		quantity	8	13	13	13	16	19
OPERATING LIMITS								
Cooling mode (min./max.)		°C	-5~50					
Heating mode (min./max.)		°C	-20~27					

* 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	PHOTO	FUNCTION	COMMENT
Manifold pipe (gas + liquid)	7ACFHH001	TAU335		• *Refrigerant gathering*	• *33,5 kW > Total indoor units power*
	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 58*
Maintenance tool	7ACELH014	TD02		• *Working parameters monitoring and recording tool*	
Smart Wi-Fi module	7ACEL1869	-		• *Remote control by the smart Wi-Fi module and controlled by the AirConnect Smart application*	• *Dimension du module: 86x86x12 mm.*

THE AIRWELL VRF SOLUTION

VVTA

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.

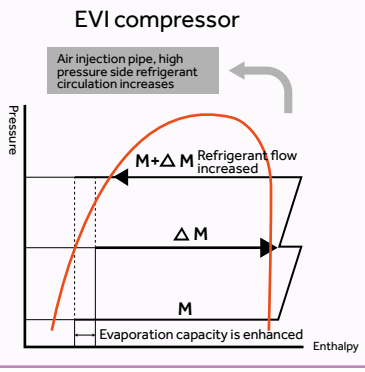
- A unit capacity of up to 73.5 kW that can be coupled up to 4 modules.
- A new **4-way coil**, for better heat exchange.
- Modbus output included. New electronic board with an addressable and configurable Modbus output directly available on the outdoor unit.

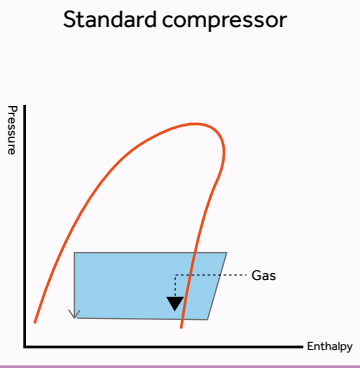
COMPATIBLE Air Connect Pro

COMPATIBLE Air Connect Smart

▶ 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.

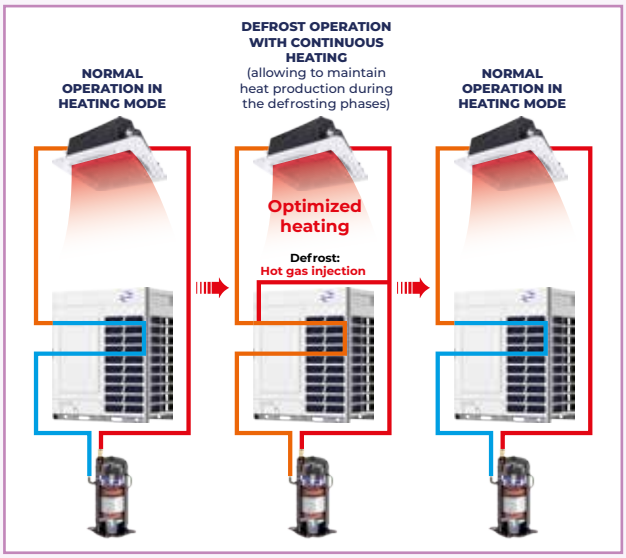




▶ Continuous heating

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.

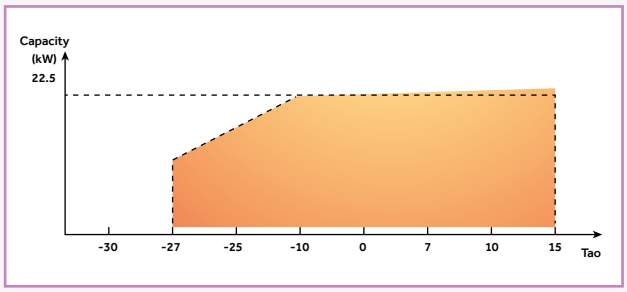


▶ Modbus output included

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

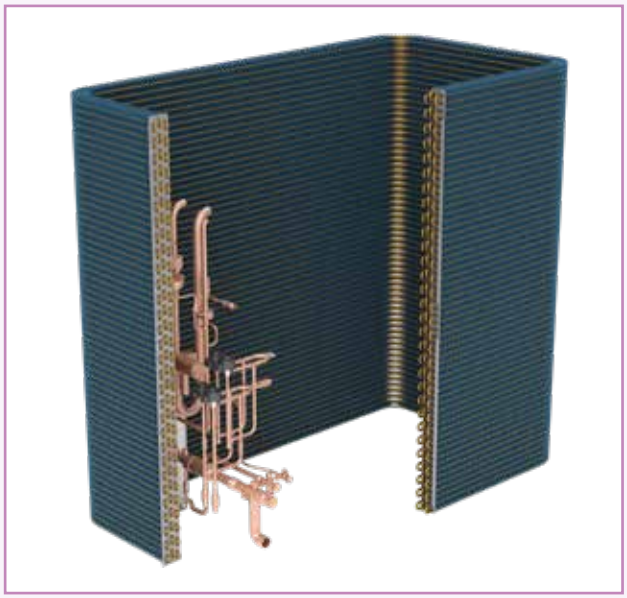
At low temperature, compared to standard machines, the heating capacity increases by 10%. In the 8HP unit for example, the heating capacity is 100% at -10°C outdoor temperature.



▶ A new 4-way heat exchanger

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

Standard anti-corrosion treatment offering resistance to salt spray for more than 1500 hours and reinforced anti-corrosion treatment on request to meet the most demanding constraints.



FlowLogic V

COMPATIBLE Air Connect Pro

COMPATIBLE Air Connect Smart

VVTA

2-pipes - Top discharge system

VVTA 250-450

VVTA 504-735

+ PRODUCT

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

RWV06 (optional, see configuration page 58)

RWV09 (optional, see configuration page 59)

FEATURES

TECHNOLOGY

DC INVERTER — DC INVERTER

BLUE FIN TREATMENT

INSTALLER FUNCTIONS

SELF DIAGNOSTIC

BMS — BMS COMPATIBLE

SERVICE MONITOR TOOL

CERTIFICATION

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

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

THE ⊕ "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 ⊕ "USER"

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

THE ⊕ "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 ⊕ "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.	PHOTO	FUNCTION	COMMENT
Gather pipe kit for 2 outdoor groups	7ACFHH013	TBS20		• *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*
Manifold pipe (gas + liquid)	7ACFHH001	TAU335		• *Refrigerant gathering*	• *33.5 kW > Total IDU power*
	7ACFHH002	TAU506		• *Refrigerant gathering*	• *33.5 kW ≤ Total IDU power < 50.6 kW*
	7ACFHH003	TAU730		• *Refrigerant gathering*	• *50.6 kW ≤ Total IDU power < 73 kW*
	7ACFHH004	TAU1350		• *Refrigerant gathering*	• *73 kW ≤ Total IDU power < 135 kW*
	7ACFHH015	TAU2040		• *Refrigerant gathering*	• *135 kW ≤ Total IDU power*
Maintenance tool	7ACELH014	TD02		• *Working parameters monitoring and recording tool*	
Smart Wi-Fi module	7ACEL1869	-		• *Remote control by the smart Wi-Fi module and controlled by the AirConnect Smart application*	• *Module diimensions: 86x86x12 mm.*

See technical draws page 63

TECHNICAL DATA

MODEL			VVTA-250R-01T32	VVTA-280R-01T32	VVTA-335R-01T32	VVTA-400R-01T32	VVTA-450R-01T32	VVTA-504R-01T32	VVTA-560R-01T32	VVTA-615R-01T32	VVTA-680R-01T32	VVTA-735R-01T32
Part number			7VF150018	7VF150019	7VF150020	7VF150021	7VF150022	7VF150023	7VF150024	7VF150025	7VF150026	7VF150027
Phase			*Three phases*									
Power		HP	8	10	12	14	16	18	20	22	24	26
COOLING MODE												
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 input		kW	6.24	7.37	10.15	11.94	13.24	15.60	16.62	20.16	22.67	36.75
Max. power input		kW	14.30	15.10	16.32	17.58	20.69	25.90	28.91	31.82	32.81	37.80
Rated current		A	10.53	12.44	17.14	20.16	22.34	26.34	28.05	34.03	37.65	59.24
Max. current		A	23.81	25.14	27.17	29.27	34.50	40.30	46.30	51.91	54.12	61.91
EER			4.04	3.80	3.30	3.35	3.40	3.23	3.37	3.05	3.00	2.00
SEER			7.25	7.09	6.69	6.60	6.36	6.78	6.75	6.54	5.83	4.90
Seasonal operating limits			287.00	280.60	264.60	261.00	251.40	268.20	267.00	258.60	230.20	193.00
HEATING MODE												
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 input		kW	5.73	6.51	8.59	10.00	11.25	13.19	14.66	18.64	19.43	26.25
Max. power input		kW	11.69	12.19	12.69	16.10	19.56	21.93	24.70	25.69	30.40	32.45
Rated current		A	9.67	10.99	14.50	16.88	18.99	22.27	24.75	31.46	32.80	44.32
Max. current		A	19.47	20.30	21.13	26.81	32.57	36.51	41.13	42.78	50.62	54.03
COP			4.40	4.30	3.90	4.00	4.00	3.82	3.82	3.30	3.50	2.80
SCOP			4.41	4.31	4.31	4.12	4.05	4.15	4.20	4.21	4.17	3.5
Seasonal operating limits			173.40	169.40	169.40	161.80	159.00	163.00	165.00	165.40	163.80	137.00
POWER SUPPLY												
Phase/Voltage/Frequency			3P/380-415V/50-60Hz									
PERFORMANCE												
Airflow (HS)		m^3/h	11000	11000	12000	13500	13500	17000	17000	18000	18000	19000
Sound pressure	Cooling mode	dB(A)	61	61	61	64	64	64	64	-	-	-
	Heating mode	dB(A)	56	56	59	59	60	61	61	61	62	62
Sound power level (HS)		dB(A)	81	82	88	88	88	88	88	88	90	90
INSTALLATION												
Outline dimensions (WxHxD)		mm	980x1690x750					1410x1690x750				
Package dimensions (WxHxD)		mm	1070x1858x850					1515x1858x850				
Net weight/Gross weight		kg	255/280					385/410				
Compressor	Type		Scroll DCI					Scroll DCI				
	Brand		Mitsubishi Electric					Mitsubishi Electric				
	Number of compressors		1					2				
Refrigerant/GWP			**R410A/2088**									
Charge		kg	10									
Liquid pipe diameter		inches	3/8"		1/2"			5/8"				
Suction pipe diameter		inches	3/4"	7/8"	1"		1"1/8	1"1/8				
Suction pipe diameter haut		inches	3/4"		7/8"		1"	1"			1"1/8	
Max. length		m	1000									
Max. length (equivalent/actual)		m	260/220									
Max. height between indoor and oudoor units (ODU down/up) [1]		m	110/90									
Standard height between indoor and oudoor units (ODU down/up) [2]		m	50/40									
Max. height between indoor units [3]		m	30									
Standard height between indoor units [4]		m	18									
External static pressure		Pa	110									
Indoor/outdoor unit power ratio (min./max.)		%	50~130									
Maximum number of connectable indoor units		quantity	13	16	20	24	27	30	33	36	40	43
OPERATING LIMITS												
Cooling mode (min. /max.)		°C	-5/+52									
Heating mode (min. /max.)		°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 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).

VVTA
Continuous heating 2-pipes

TECHNICAL DATA **FOR TWO COMBINATIONS**

MODEL			VVTA-800R	VVTA-850R	VVTA-900R	VVTA-954R	VVTA-1008R	VVTA-1064R	VVTA-1120R
COMBINATIONS			VVTA-400R 7VF150021 VVTA-400R 7VF150021	VVTA-400R 7VF150021 VVTA-450R 7VF150022	VVTA-450R 7VF150022 VVTA-450R 7VF150022	VVTA-450R 7VF150022 VVTA-504R 7VF150023	VVTA-504R 7VF150023 VVTA-504R 7VF150023	VVTA-504R 7VF150023 VVTA-560R 7VF150024	VVTA-560R 7VF150024 VVTA-560R 7VF150024
Phase			*Three phases*						
Power		HP	28	30	32	34	36	38	40
COOLING MODE									
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	28.84	31.20	32.22	33.23
Max. power input		kW	35.16	38.27	41.38	46.59	51.80	54.81	57.82
Rated current		A	40.32	42.50	44.69	48.68	52.67	54.39	56.11
Max. current		A	58.54	63.77	69.00	74.80	80.60	86.60	92.60
EER			3.35	3.38	3.40	3.31	3.23	3.30	3.37
SEER			6.60	6.36	6.36	6.36	6.78	6.75	6.75
Seasonal operating limits			261	251	251	251	268	267	267
HEATING MODE									
Rated power*		**kW**	**80.00**	**85.00**	**90.00**	**95.40**	**100.80**	**106.40**	**112.00**
Rated power input		kW	20.00	21.25	22.50	24.44	26.39	27.85	29.32
Max. power input		kW	32.20	35.66	39.12	41.49	43.86	46.63	49.40
Rated current		A	33.76	35.87	37.98	41.27	44.55	47.02	49.50
Max. current		A	53.61	59.38	65.14	69.08	73.03	77.64	82.25
COP			4.00	4.00	4.00	3.90	3.82	3.82	3.82
SCOP			4.12	4.05	4.05	4.05	4.15	4.15	4.20
Seasonal operating limits			162	159	159	159	163	163	165
POWER SUPPLY									
Phase/Voltage/Frequency			3P/380-415V/50-60Hz						
PERFORMANCE									
Airflow (HS)		m^3/h	27000	27000	27000	30500	34000	34000	34000
Sound pressure	Cooling mode	dB(A)	62	62.5	63	63.5	64	64	64
	Heating mode	dB(A)	62	62.5	63	63.5	64	64	64
Sound power level (HS)		dB(A)	91	91	91	91	91	91	91
INSTALLATION									
Outline dimensions (WxHxD)		mm	980x1690x750 +980x1690x750			980x1690x750 + 1410x1690x750	1410x1690x750 + 1410x1690x750		
Package dimensions (WxHxD)		mm	1070x1858x850 + 1070x1858x850			1070x1858x850 + 1515x1858x850	1485x1858x850 + 1485x1858x850		
Net weight/Gross weight		kg	255/280 + 255/280			255/280 + 385/410	385/410 + 385/410		
Compressor	Type		Scroll DCI						
	Brand		Mitsubishi Electric						
	Number of compressors		2			3	4		
Refrigerant/GWP			**R410A/2088**						
Charge		kg	20						
Liquid pipe diameter		inches	5/8"	3/4"					
Suction pipe diameter		inches	1"1/8	1"1/4			1"1/2		
Max. length		m	1000						
Max. length (equivalent/actual)		m	260/220						
Max. height between indoor and oudoor units (ODU down/up) (1)		m	110/90						
Standard height between indoor and oudoor units (ODU down/up) (2)		m	50/40						
Max. height between indoor units(3)		m	30						
Standard height between indoor units (4)		m	18						
External static pressure		Pa	110						
Indoor/outdoor unit power ratio (min./max.)		%	50~130						
Maximum number of connectable indoor units		quantity	47	50	53	56	59	63	64
OPERATING LIMITS									
Cooling mode (min./max.)		°C	-5~52						
Heating mode (min./max.)		°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 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).

TECHNICAL DATA **FOR TWO COMBINATIONS**

MODEL			VVTA-1175R	VVTA-1230R	VVTA-1295R	VVTA-1360R	VVTA-1415R	VVTA-1470R
COMBINATIONS			VVTA-560R	VVTA-615R	VVTA-615R	VVTA-680R	VVTA-680R	VVTA-735R
			7VF150024	7VF150025	7VF150025	7VF150026	7VF150026	7VF150027
			VVTA-615R	VVTA-615R	VVTA-680R	VVTA-680R	VVTA-735R	VVTA-735R
			7VF150025	7VF150025	7VF150026	7VF150026	7VF150027	7VF150027
Phase			*Three phases*					
Power		HP	42	44	46	48	50	52
COOLING MODE								
Rated power*		**kW**	**117.50**	**123.00**	**129.50**	**136.00**	**141.50**	**147.00**
Rated power input		kW	36.78	40.32	42.83	45.34	59.42	73.50
Max. power input		kW	60.73	63.64	64.63	65.62	70.61	75.60
Rated current		A	62.09	68.07	71.68	75.30	96.89	118.48
Max. current		A	98.21	103.82	106.03	108.24	116.03	123.82
EER			3.19	3.05	3.02	3.00	2.38	2.00
SEER			6.54	6.54	5.83	5.83	4.90	4.90
Seasonal operating limits			259	259	230	230	193	193
HEATING MODE								
Rated power*		**kW**	**117.50**	**123.00**	**129.50**	**136.00**	**141.50**	**147.00**
Rated power input		kW	33.30	37.27	38.06	38.86	45.68	52.50
Max. power input		kW	50.39	51.38	56.09	60.80	62.85	64.90
Rated current		A	56.21	62.92	64.26	65.60	77.11	88.63
Max. current		A	83.90	85.55	93.39	101.23	104.65	108.06
COP			3.53	3.30	3.40	3.50	3.10	2.80
SCOP			4.20	4.21	4.17	4.17	3.50	3.50
Seasonal operating limits			165	165	164	164	137	137
POWER SUPPLY								
Phase/Voltage/Frequency			3P/380-415V/50-60Hz					
PERFORMANCE								
Airflow (HS)		m^3/h	35000	36000	36000	36000	37000	38000
Sound pressure	Cooling mode	dB(A)	64	64	64.5	65	65	65
	Heating mode	dB(A)	64	64	64.5	65	65	65
Sound power level (HS)		dB(A)	92	93	93	93	93	93
INSTALLATION								
Outline dimensions (WxHxD)		mm	1410x1690x750 + 1410x1690x750					
Package dimensions (WxHxD)		mm	1485x1858x850 + 1485x1858x850					
Net weight/Gross weight		kg	385/410 + 385/410					
Compressor	Type		Scroll DCI					
	Brand		Mitsubishi Electric					
	Number of compressors		4					
Refrigerant/GWP			**R410A/2088**					
Charge		kg	20					
Liquid pipe diameter		inches	3/4"					
Suction pipe diameter		inches	1"1/2					
Max. length		m	1000					
Max. length (equivalent/actual)		m	260/220					
Max. height between indoor and oudoor units (ODU down/up) [1]		m	110/90					
Standard height between indoor and oudoor units (ODU down/up) [2]		m	50/40					
Max. height between indoor units[3]		m	30					
Standard height between indoor units [4]		m	18					
External static pressure		Pa	110					
Indoor/outdoor unit power ratio (min./max.)		%	50~130					
Maximum number of connectable indoor units		quantity	64					
OPERATING LIMITS								
Cooling mode (min./max.)		°C	-5~52					
Heating mode (min./max.)		°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 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).

VVTA
Continuous heating 2-pipes

TECHNICAL DATA **FOR THREE COMBINATIONS**

MODEL			VVTA-1512R	VVTA-1568R	VVTA-1624R	VVTA-1680R	VVTA-1735R	VVTA-1790R	VVTA-1845R
COMBINATIONS			VVTA-504R	VVTA-504R	VVTA-504R	VVTA-560R	VVTA-615R	VVTA-615R	VVTA-615R
			7VF150023	7VF150023	7VF150023	7VF150024	7VF150025	7VF150025	7VF150025
			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 MODE									
Rated power*		**kW**	**151.20**	**156.80**	**162.40**	**168.00**	**173.50**	**179.00**	**184.50**
Rated power input		kW	46.80	47.82	48.83	49.85	53.39	56.94	60.48
Max. power input		kW	77.70	80.71	83.72	86.73	89.64	92.55	95.46
Rated current		A	79.01	80.73	82.44	84.16	90.14	96.12	102.10
Max. current		A	120.90	126.90	132.90	138.90	144.51	150.12	155.73
EER			3.23	3.28	3.33	3.37	3.25	3.14	3.05
SEER			6.78	6.75	6.75	6.75	6.54	6.54	6.54
Seasonal operating limits			268	267	267	267	259	259	259
HEATING MODE									
Rated power*		**kW**	**151.20**	**156.80**	**162.40**	**168.00**	**173.50**	**179.00**	**184.50**
Rated power input		kW	39.58	41.05	42.51	43.98	47.96	51.93	55.91
Max. power input		kW	65.79	68.56	71.33	74.10	75.09	76.08	77.08
Rated current		A	66.82	69.30	71.77	74.25	80.96	87.67	94.39
Max. current		A	109.54	114.15	118.76	123.38	125.03	126.68	128.33
COP			3.82	3.82	3.82	3.82	3.62	3.45	3.30
SCOP			4.15	4.15	4.15	4.20	4.20	4.20	4.21
Seasonal operating limits			163	163	163	165	165	165	165
POWER SUPPLY									
Phase/Voltage/Frequency			3P/380-415V/50-60Hz						
PERFORMANCE									
Airflow (HS)		m^3/h	51000	51000	51000	51000	52000	53000	54000
Sound pressure	Cooling mode	dB(A)	65.8	65.8	65.8	65.8	65.8	65.8	65.8
	Heating mode	dB(A)	65.8	65.8	65.8	65.8	65.8	65.8	65.8
Sound power level (HS)		dB(A)	93	93	93	93	93.5	94	95
INSTALLATION									
Outline dimensions (WxHxD)		mm	1410x1690x750 + 1410x1690x750+1410x1690x750						
Package dimensions (WxHxD)		mm	1485x1858x850 + 1485x1858x850+1485x1858x850						
Net weight/Gross weight		kg	385/410 + 385/410 + 385/410						
Compressor	Type		Scroll DCI						
	Brand		Mitsubishi Electric						
	Number of compressors		6						
Refrigerant/GWP			**R410A/2088**						
Charge		kg	30						
Liquid pipe diameter		inches	3/4"						
Suction pipe diameter		inches	1"1/2		1"5/8				
Max. length		m	1000						
Max. length (equivalent/actual)		m	260/220						
Max. height between indoor and oudoor units (ODU down/up) [1]		m	110/90						
Standard height between indoor and oudoor units (ODU down/up) [2]		m	50/40						
Max. height between indoor units[3]		m	30						
Standard height between indoor units [4]		m	18						
External static pressure		Pa	110						
Indoor/outdoor unit power ratio (min./max.)		%	50~130						
Maximum number of connectable indoor units		quantity	64						
OPERATING LIMITS									
Cooling mode (min./max.)		°C	-5~52						
Heating mode (min./max.)		°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 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).

TECHNICAL DATA **FOR THREE COMBINATIONS**

MODEL			VVTA-1910R	VVTA-19750R	VVTA-2040	VVTA-2095R	VVTA-2150R	VVTA-2205R
COMBINATIONS			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
			7VF150025	7VF150026	7VF150026	7VF150026	7VF150027	7VF150027
			VVTA-680R	VVTA-680R	VVTA-680R	VVTA-680R	VVTA-680R	VVTA-735R
			7VF150026	7VF150026	7VF150026	7VF150026	7VF150026	7VF150027
Phase					*Three phases*			
Power		HP	68	70	72	74	76	78
COOLING MODE								
Rated power*		**kW**	**191.00**	**197.50**	**204.00**	**209.50**	**215.00**	**220.50**
Rated power input		kW	62.99	65.50	68.01	82.09	96.17	110.25
Max. power input		kW	96.45	97.44	98.43	103.42	108.41	113.40
Rated current		A	105.72	109.33	112.95	134.54	156.13	177.72
Max. current		A	157.94	160.15	162.36	170.15	177.94	185.73
EER			3.03	3.02	3.00	2.55	2.24	2.00
SEER			5.83	5.83	5.83	4.90	4.90	4.90
Seasonal operating limits			230	230	230	193	193	193
HEATING MODE								
Rated power*		**kW**	**191.00**	**197.50**	**204.00**	**209.50**	**215.00**	**220.50**
Rated power input		kW	56.70	57.49	58.29	65.11	71.93	78.75
Max. power input		kW	81.78	86.49	91.20	93.25	95.30	97.35
Rated current		A	95.72	97.06	98.40	109.91	121.43	132.95
Max. current		A	136.17	144.01	151.85	155.26	158.67	162.09
COP			3.37	3.44	3.50	3.22	2.99	2.80
SCOP			4.17	4.17	4.17	3.50	3.50	3.50
Seasonal operating limits			164	164	164	137	137	137
POWER SUPPLY								
Phase/Voltage/Frequency			3P/380-415V/50-60Hz					
PERFORMANCE								
Airflow (HS)		m^3/h	54000	54000	54000	55000	56000	57000
Sound pressure	Cooling mode	dB(A)	66	66.5	66.8	66.8	66.8	66.8
	Heating mode	dB(A)	66	66.5	66.8	66.8	66.8	66.8
Sound power level (HS)		dB(A)	95	95	95	95	95	95
INSTALLATION								
Outline dimensions (WxHxD)		mm	1410x1690x750 + 1410x1690x750+1410x1690x750					
Package dimensions (WxHxD)		mm	1485x1858x850 + 1485x1858x850+1485x1858x850					
Net weight/Gross weight		kg	385/410 + 385/410 + 385/410					
Compressor	Type		Scroll DCI					
	Brand		Mitsubishi Electric					
	Number of compressors		6					
Refrigerant/GWP			**R410A/2088**					
Charge		kg	30					
Liquid pipe diameter		inches	7/8"					
Suction pipe diameter		inches	1"3/4					
Max. length		m	1000					
Max. length (equivalent/actual)		m	260/220					
Max. height between indoor and oudoor units (ODU down/up) (1)		m	110/90					
Standard height between indoor and oudoor units (ODU down/up) (2)		m	50/40					
Max. height between indoor units(3)		m	30					
Standard height between indoor units (4)		m	18					
External static pressure		Pa	110					
Indoor/outdoor unit power ratio (min./max.)		%	50~130					
Maximum number of connectable indoor units		quantity	64					
OPERATING LIMITS								
Cooling mode (min./max.)		°C	-5~52					
Heating mode (min./max.)		°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 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).

VVTA
Continuous heating 2-pipes

TECHNICAL DATA **FOR FOUR COMBINATIONS**

MODEL			VVTA-2240R	VVTA-2295R	VVTA-2350R	VVTA-2405R	VVTA-2460R	VVTA-2525R	VVTA-2590R
COMBINATIONS			VVTA-560R 7VF150024	VVTA-560R 7VF150024	VVTA-560R 7VF150024	VVTA-560R 7VF150024	VVTA-615R 7VF150025	VVTA-680R 7VF150026	VVTA-680R 7VF150026
			VVTA-560R 7VF150024	VVTA-560R 7VF150024	VVTA-560R 7VF150024	VVTA-615R 7VF150025	VVTA-615R 7VF150025	VVTA-615R 7VF150025	VVTA-680R 7VF150026
			VVTA-560R 7VF150024	VVTA-560R 7VF150024	VVTA-615R 7VF150025	VVTA-615R 7VF150025	VVTA-615R 7VF150025	VVTA-615R 7VF150025	VVTA-615R 7VF150025
			VVTA-560R 7VF150024	VVTA-615R 7VF150025	VVTA-615R 7VF150025	VVTA-615R 7VF150025	VVTA-615R 7VF150025	VVTA-615R 7VF150025	VVTA-615R 7VF150025
Phase			*Three phases*						
Power		HP	80	82	84	86	88	90	92
COOLING MODE									
Rated power*		**kW**	**224.00**	**229.50**	**235.00**	**240.50**	**246.00**	**252.50**	**259.00**
Rated power input		kW	66.47	70.01	73.55	77.10	80.64	83.15	85.66
Max. power input		kW	115.64	118.55	121.46	124.37	127.28	128.27	129.26
Rated current		A	112.21	118.19	124.18	130.16	136.14	139.75	143.37
Max. current		A	185.20	190.81	196.42	202.03	207.64	209.85	212.06
EER			3.37	3.28	3.19	3.12	3.05	3.04	3.02
SEER			6.75	6.54	6.54	6.54	6.54	5.83	5.83
Seasonal operating limits			267	259	259	259	259	230	230
HEATING MODE									
Rated power*		**kW**	**224.00**	**229.50**	**235.00**	**240.50**	**246.00**	**252.50**	**259.00**
Rated power input		kW	58.64	62.62	66.59	70.57	74.55	75.34	76.13
Max. power input		kW	98.80	99.79	100.78	101.78	102.77	107.48	112.18
Rated current		A	98.99	105.71	112.42	119.13	125.85	127.19	128.52
Max. current		A	164.50	166.15	167.81	169.46	171.11	178.95	186.79
COP			3.82	3.67	3.53	3.41	3.30	3.35	3.40
SCOP			4.20	4.20	4.20	4.20	4.21	4.17	4.17
Seasonal operating limits			165	165	165	165	165	164	164
POWER SUPPLY									
Phase/Voltage/Frequency			3P/380-415V/50-60Hz						
PERFORMANCE									
Airflow (HS)		m^3/h	68000	69000	70000	71000	72000	72000	72000
Sound pressure	Cooling mode	dB(A)	67	67	67	67	67	67.5	67.5
	Heating mode	dB(A)	67	67	67	67	67	67.5	67.5
Sound power level (HS)		dB(A)	94	95	95	96	96	96	96
INSTALLATION									
Outline dimensions (WxHxD)		mm	1410x1690x750 + 1410x1690x750 + 1410x1690x750 + 1410x1690x750						
Package dimensions (WxHxD)		mm	1485x1858x850 + 1485x1858x850 + 1485x1858x850 + 1485x1858x850						
Net weight/Gross weight		kg	385/410 + 385/410 + 385/410 + 385/410						
Compressor	Type		Scroll DCI						
	Brand		Mitsubishi Electric						
	Number of compressors		8						
Refrigerant/GWP			**R410A/2088**						
Charge		kg	40						
Liquid pipe diameter		inches	7/8"			1"			
Suction pipe diameter		inches	1"3/4			2"			
Max. length		m	1000						
Max. length (equivalent/actual)		m	260/220						
Max. height between indoor and oudoor units (ODU down/up) [1]		m	110/90						
Standard height between indoor and oudoor units (ODU down/up) [2]		m	50/40						
Max. height between indoor units[3]		m	30						
Standard height between indoor units [4]		m	18						
External static pressure		Pa	110						
Indoor/outdoor unit power ratio (min./max.)		%	50~130						
Maximum number of connectable indoor units		quantity	64						
OPERATING LIMITS									
Cooling mode (min./max.)		°C	-5~52						
Heating mode (min./max.)		°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 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).

TECHNICAL DATA **FOR FOUR COMBINATIONS**

MODEL			VVTA-2665R	VVTA-2720R	VVTA-2775R	VVTA-2830R	VVTA-2885R	VVTA-2940R
COMBINATIONS			VVTA-680R 7VF150026 VVTA-680R 7VF150026 VVTA-680R 7VF150026 VVTA-615R 7VF150025	VVTA-680R 7VF150026 VVTA-680R 7VF150026 VVTA-680R 7VF150026 VVTA-680R 7VF150026	VVTA-735R 7VF150027 VVTA-680R 7VF150026 VVTA-680R 7VF150026 VVTA-680R 7VF150026	VVTA-735R 7VF150027 VVTA-735R 7VF150027 VVTA-680R 7VF150026 VVTA-680R 7VF150026	VVTA-735R 7VF150027 VVTA-735R 7VF150027 VVTA-735R 7VF150027 VVTA-680R 7VF150026	VVTA-735R 7VF150027 VVTA-735R 7VF150027 VVTA-735R 7VF150027 VVTA-735R 7VF150027
Phase			*Three phases*					
Power		HP	94	96	98	100	102	104
COOLING MODE								
Rated power*		**kW**	**265.50**	**272.00**	**277.50**	**283.00**	**288.50**	**294.00**
Rated power input		kW	88.17	90.68	104.76	118.84	132.92	147.00
Max. power input		kW	130.25	131.24	136.23	141.22	146.21	151.20
Rated current		A	146.98	150.60	172.19	193.78	215.37	236.96
Max. current		A	214.27	216.48	224.27	232.06	239.85	247.64
EER			3.01	3.00	2.65	2.38	2.17	2.00
SEER			5.83	5.83	4.90	4.90	4.90	4.90
Seasonal operating limits			230	230	193	193	193	193
HEATING MODE								
Rated power*		**kW**	**265.50**	**272.00**	**277.50**	**283.00**	**288.50**	**294.00**
Rated power input		kW	76.92	77.71	84.54	91.36	98.18	105.00
Max. power input		kW	116.89	121.60	123.65	125.70	127.75	129.80
Rated current		A	129.86	131.20	142.71	154.23	165.75	177.26
Max. current		A	194.63	202.46	205.88	209.29	212.70	216.12
COP			3.45	3.50	3.28	3.10	2.94	2.80
SCOP			4.17	4.17	3.50	3.50	3.50	3.50
Seasonal operating limits			164	164	137	137	137	137
POWER SUPPLY								
Phase/Voltage/Frequency			3P/380-415V/50-60Hz					
PERFORMANCE								
Airflow (HS)		m^3/h	72000	72000	73000	74000	75000	76000
Sound pressure	Cooling mode	dB(A)	68	68	68	68	68	68
	Heating mode	dB(A)	68	68	68	68	68	68
Sound power level (HS)		dB(A)	96	96	96	96	96	96
INSTALLATION								
Outline dimensions (WxHxD)		mm	1410x1690x750 + 1410x1690x750 + 1410x1690x750 + 1410x1690x750					
Package dimensions (WxHxD)		mm	1485x1858x850 + 1485x1858x850 + 1485x1858x850 + 1485x1858x850					
Net weight/Gross weight		kg	385/410 + 385/410 + 385/410 + 385/410					
Compressor	Type		Scroll DCI					
	Brand		Mitsubishi Electric					
	Number of compressors		8					
Refrigerant/GWP			**R410A/2088**					
Charge		kg	40					
Liquid pipe diameter		inches	1"					
Suction pipe diameter		inches	2"		2"1/8			
Max. length		m	1000					
Max. length (equivalent/actual)		m	260/220					
Max. height between indoor and oudoor units (ODU down/up) [1]		m	110/90					
Standard height between indoor and oudoor units (ODU down/up) [2]		m	50/40					
Max. height between indoor units[3]		m	30					
Standard height between indoor units [4]		m	18					
External static pressure		Pa	110					
Indoor/outdoor unit power ratio (min./max.)		%	50~130					
Maximum number of connectable indoor units		quantity	64					
OPERATING LIMITS								
Cooling mode (min./max.)		°C	-5~52					
Heating mode (min./max.)		°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 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).

THE AIRWELL VRF SOLUTION

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 mono-modules 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.

Stores

Hotels

Offices

COMPATIBLE Air Connect Pro

COMPATIBLE Air Connect Smart

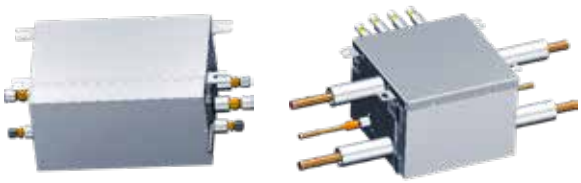
▶ Modbus output included

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.

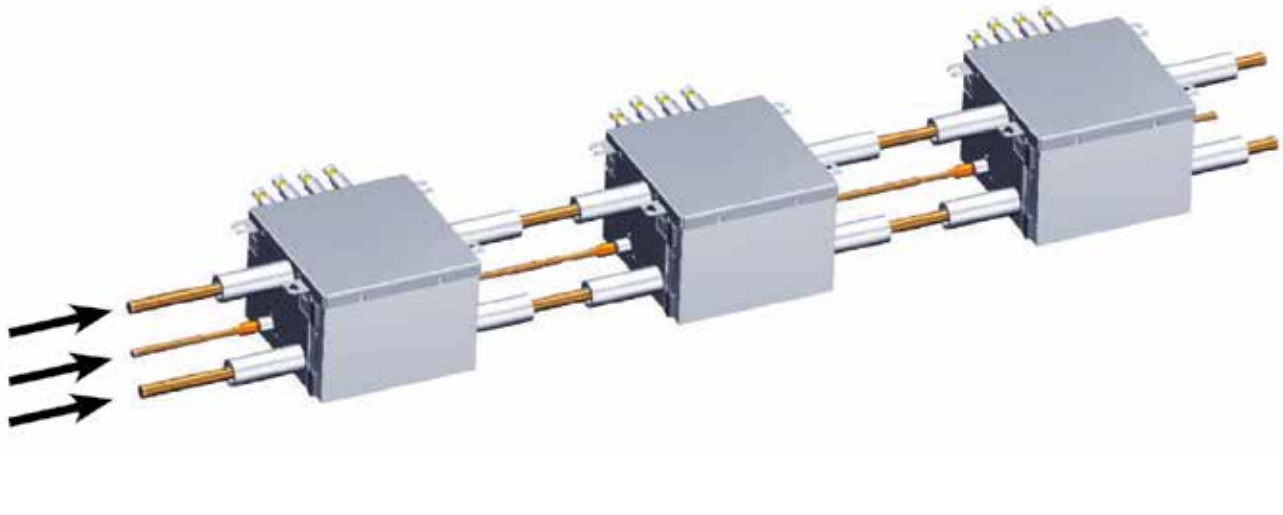
In addition, the new selection boxes are equipped with **3 additional tubes** at the output, allowing it to be put in series for unprecedented modularity. This is valid for boxes with 4 outlets.



- 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
VVEA HR 450 KIT (4 outlets)	7ACELH031	< 45	1P/220-240V/50-60Hz	20	405x300x421
	Total for 4 outlets		Total by outlet		
	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*.



FlowLogic V

VVEA
3-pipes with heat recovery


VVEA 250-450


VVEA 504-735

COMPATIBLE AirConnect Pro

COMPATIBLE AirConnect Smart

+ PRODUCT

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


RWV06 (optional, see configuration page 58)


RWV09 (optional, see configuration page 59)

FEATURES

TECHNOLOGY

DC INVERTER

BLUE FIN TREATMENT

INSTALLER FUNCTIONS

SELF DIAGNOSTIC

BMS COMPATIBLE

SERVICE MONITOR TOOL

CERTIFICATION

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

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

THE + "SUSTAINABLE DEVELOPMENT"
> Heat recovery between units, for better energy efficiency.

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

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

See technical draws page 64

TECHNICAL DATA

MODEL		VVEA-335R-01T32	VVEA-400R-01T32	VVEA-450R-01T32	VVEA-504R-01T32	VVEA-560R-01T32	VVEA-615R-01T32
Part number		**7VF150012**	**7VF150013**	**7VF150014**	**7VF150015**	**7VF150016**	**7VF150017**
Phase		*Three phases*					
Power	HP	12	14	16	18	20	22
COOLING MODE							
Rated power*	**kW**	**33.50**	**40.00**	**45.00**	**50.00**	**56.00**	**60.00**
Rated power input	kW	9.94	12.31	13.93	16.13	17.23	20.00
Max. power input	kW	18.20	19.20	25.10	28.50	32.00	33.00
Rated current	A	16.43	20.33	23.01	26.64	28.46	33.03
Max. current	A	30.06	31.71	41.45	47.07	52.85	54.50
EER		3.37	3.25	3.23	3.10	3.25	3.00
SEER		6.46	6.37	6.86	6.48	5.90	5.63
Seasonal operating limits		255.40	251.80	271.40	256.20	233.00	222.20
HEATING MODE							
Rated power*	**kW**	**33.50**	**40.00**	**45.00**	**50.00**	**56.00**	**60.00**
Rated power input	kW	8.77	10.53	11.39	13.70	15.77	17.91
Max. power input	kW	17.40	18.40	22.70	25.50	29.40	30.40
Rated current	A	14.48	17.38	18.81	22.62	26.05	29.58
Max. current	A	28.74	30.39	37.49	42.11	48.55	50.21
COP		3.82	3.80	3.95	3.65	3.55	3.35
SCOP		3.99	3.86	4.21	3.99	3.93	3.50
Seasonal operating limits		156.60	151.40	165.40	156.60	154.20	137.00
POWER SUPPLY							
Phase/Voltage/Frequency		3P/380-415V/50-60Hz					
PERFORMANCE							
Airflow (HS)	m^3/h	13500	13500	17000	17000	19000	19000
Sound pressure (HS)	dB(A)	60	61	62	63	63	64
INSTALLATION							
Outline dimensions (WxHxD)	mm	980x1690x750		1410x1690x750			
Package dimensions (WxHxD)	mm	1070x1858x850		1515x1858x850			
Net weight/Gross weight	kg	257/282		366/395		375/404	
Compressor	Type	Scroll DCI					
	Brand	Mitsubishi Electric					
	Number of compressors	1		2			
Refrigerant/GWP		**R410A/2088**					
Charge	kg	10					
Liquid pipe diameter	inches	1/2"			5/8"		
Suction pipe diameter	inches	1"		1"1/8			
Suction pipe diameter haut	inches	7/8"		1"			
Max. length	m	1000					
Max. length (equivalent/actual)	m	260/220					
Max. height between indoor and oudoor units (ODU down/up) (1)	m	110/90					
Standard height between indoor and oudoor units (ODU down/up) (2)	m	50/40					
Max. height between indoor units(3)	m	30					
Standard height between indoor units (4)	m	18					
External static pressure	Pa	110					
Indoor/outdoor unit power ratio (min./max.)	%	50~130					
Maximum number of connectable indoor units	quantity	20	24	27	30	33	36
OPERATING LIMITS							
Cooling mode (min./max.)	°C	-5~50					
Heating mode (min./max.)	°C	-23~21					

(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 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).

VVEA
3-pipes with heat recovery

TECHNICAL DATA **FOR TWO COMBINATIONS**

MODEL		VVEA-670R	VVEA-735R	VVEA-800R	VVEA-850R
COMBINATIONS		VVEA-335R 7VF150012 VVEA-335R 7VF150012	VVEA-335R 7VF150012 VVEA-400R 7VF150013	VVEA-400R 7VF150013 VVEA-400R 7VF150013	VVEA-400R 7VF150013 VVEA-450R 7VF150014
Phase			*Three phases*		
Power	HP	24	26	28	30
COOLING MODE					
Rated power*	**kW**	**67.00**	**73.50**	**80.00**	**85.00**
Rated power input	kW	19.88	22.25	24.62	26.24
Max. power input	kW	36.40	37.40	38.40	44.30
Rated current	A	32.83	36.74	40.65	43.33
Max. current	A	60.11	61.77	63.42	73.16
EER		3.37	3.30	3.25	3.24
SEER		6.46	6.37	6.37	6.37
Seasonal operating limits		255.40	251.80	251.80	251.80
HEATING MODE					
Rated power*	**kW**	**67.00**	**73.50**	**80.00**	**85.00**
Rated power input	kW	17.54	19.30	21.05	21.92
Max. power input	kW	34.80	35.80	36.80	41.10
Rated current	A	28.97	31.87	34.77	36.20
Max. current	A	57.47	59.12	60.78	67.88
COP		3.82	3.81	3.80	3.88
SCOP		3.99	3.86	3.86	3.86
Seasonal operating limits		156.60	151.40	151.40	151.40
POWER SUPPLY					
Phase/Voltage/Frequency			3P/380-415V/50-60Hz		
PERFORMANCE					
Airflow (HS)	m^3/h	27000	27000	27000	30500
Sound pressure (HS)	dB(A)	63	64	64	65
INSTALLATION					
Outline dimensions (WxHxD)	mm		980x1690x750 + 980x1690x750		980x1690x750 + 980x1410x750
Package dimensions (WxHxD)	mm		1070x1858x850 + 1070x1858x850		1070x1858x850 + 1070x1480x850
Net weight/Gross weight	kg		246/271 + 246/271		246/271 + 366/395
Compressor – Type			Scroll DCI		
Compressor – Brand			Mitsubishi Electric		
Compressor – Number of compressors			2		3
Refrigerant/GWP			**R410A/2088**		
Charge	kg		20		
Liquid pipe diameter	inches		5/8"		3/4"
Suction pipe diameter	inches		1"1/8		1"1/4
Suction pipe diameter haut	inches		1"		1"1/8
Max. length	m		1000		
Max. length (equivalent/actual)	m		260/220		
Max. height between indoor and oudoor units (ODU down/up) (1)	m		110/90		
Standard height between indoor and oudoor units (ODU down/up) (2)	m		50/40		
Max. height between indoor units (3)	m		30		
Standard height between indoor units (4)	m		18		
External static pressure	Pa		110		
Indoor/outdoor unit power ratio (min./max.)	%		50~130		
Maximum number of connectable indoor units	quantity	40	43	47	50
OPERATING LIMITS					
Cooling mode (min./max.)	°C		-5~50		
Heating mode (min./max.)	°C		-23~21		

(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 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).

TECHNICAL DATA **FOR TWO COMBINATIONS**

MODEL		VVEA-900R	VVEA-954R	VVEA-1008R	VVEA-1064R	VVEA-1120R	VVEA-1175R	VVEA-1230R
COMBINATIONS		VVEA-450R 7VF150014 VVEA-450R 7VF150014	VVEA-450R 7VF150014 VVEA-504R 7VF150015	VVEA-504R 7VF150015 VVEA-504R 7VF150015	VVEA-504R 7VF150015 VVEA-560R 7VF150016	VVEA-560R 7VF150016 VVEA-560R 7VF150016	VVEA-560R 7VF150016 VVEA-615R 7VF150017	VVEA-615R 7VF150017 VVEA-615R 7VF150017
Phase					*Three phases*			
Power	HP	32	34	36	38	40	42	44
COOLING MODE								
Rated power*	**kW**	**90.00**	**95.00**	**100.00**	**106.00**	**112.00**	**116.00**	**120.00**
Rated power input	kW	27.86	30.06	32.26	33.36	34.46	37.23	40.00
Max. power input	kW	50.20	53.60	57.00	60.50	64.00	65.00	66.00
Rated current	A	46.02	49.65	53.27	55.09	56.91	61.49	66.06
Max. current	A	82.91	88.52	94.14	99.92	105.70	107.35	109.00
EER		3.23	3.16	3.10	3.18	3.25	3.12	3.00
SEER		6.86	6.48	6.48	5.90	5.90	5.63	5.63
Seasonal operating limits		271.40	256.20	256.20	233.00	233.00	222.20	222.20
HEATING MODE								
Rated power*	**kW**	**90.00**	**95.00**	**100.00**	**106.00**	**112.00**	**116.00**	**120.00**
Rated power input	kW	22.78	25.09	27.40	29.47	31.54	33.68	35.82
Max. power input	kW	45.40	48.20	51.00	54.90	58.80	59.80	60.80
Rated current	A	37.63	41.44	45.25	48.67	52.09	55.62	59.16
Max. current	A	74.98	79.60	84.23	90.67	97.11	98.76	100.41
COP		3.95	3.79	3.65	3.60	3.55	3.44	3.35
SCOP		4.21	3.99	3.99	3.93	3.93	3.50	3.50
Seasonal operating limits		165.40	156.60	156.60	154.20	154.20	137.00	137.00
POWER SUPPLY								
Phase/Voltage/Frequency		3P/380-415V/50-60Hz						
PERFORMANCE								
Airflow (HS)	m^3/h	34000	34000	34000	36000	38000	38000	38000
Sound pressure (HS)	dB(A)	65	66	66	66	66	67	67
INSTALLATION								
Outline dimensions (WxHxD)	mm	1410x1690x750 + 1410x1690x750						
Package dimensions (WxHxD)	mm	1515x1858x850 + 1515x1858x850						
Net weight/Gross weight	kg	366/395 + 366/395			366/395 + 375/404		375/404 + 375/404	
Compressor Type		Scroll DCI						
Compressor Brand		Mitsubishi Electric						
Compressor Number of compressors		4						
Refrigerant/GWP		**R410A/2088**						
Charge	kg	20						
Liquid pipe diameter	inches	3/4"						
Suction pipe diameter	inches	1"1/4		1"1/2				
Suction pipe diameter haut	inches	1"1/8		1"3/8				
Max. length	m	1000						
Max. length (equivalent/actual)	m	260/220						
Max. height between indoor and oudoor units (ODU down/up) (1)	m	110/90						
Standard height between indoor and oudoor units (ODU down/up) (2)	m	50/40						
Max. height between indoor units(3)	m	30						
Standard height between indoor units (4)	m	18						
External static pressure	Pa	110						
Indoor/outdoor unit power ratio (min./max.)	%	50~130						
Maximum number of connectable indoor units	quantity	53	56	59	63	64	64	64
OPERATING LIMITS								
Cooling mode (min./max.)	°C	-5~50						
Heating mode (min./max.)	°C	-23~21						

(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 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).

VVEA
3-pipes with heat recovery

TECHNICAL DATA **FOR THREE COMBINATIONS**

MODEL		VVEA-1300R	VVEA-1350R	VVEA-1404R	VVEA-1458R	VVEA-1512R	VVEA-1568R
COMBINATIONS		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
		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		*Three phases*					
Power	HP	46	48	50	52	54	56
COOLING MODE							
Rated power*	**kW**	**130.00**	**135.00**	**140.00**	**145.00**	**150.00**	**156.00**
Rated power input	kW	40.17	41.80	43.99	46.19	48.39	49.49
Max. power input	kW	69.40	75.30	78.70	82.10	85.50	89.00
Rated current	A	66.34	69.03	72.65	76.28	79.91	81.73
Max. current	A	114.61	124.36	129.97	135.59	141.20	146.98
EER		3.24	3.23	3.18	3.14	3.10	3.15
SEER		6.37	6.86	6.48	6.48	6.48	5.90
Seasonal operating limits		251.80	271.40	256.20	256.20	256.20	233.00
HEATING MODE							
Rated power*	**kW**	**130.00**	**135.00**	**140.00**	**145.00**	**150.00**	**156.00**
Rated power input	kW	33.31	34.18	36.48	38.79	41.10	43.17
Max. power input	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	71.29
Max. current	A	105.37	112.47	117.09	121.72	126.34	132.78
COP		3.90	3.95	3.84	3.74	3.65	3.61
SCOP		3.86	4.21	3.99	3.99	3.99	3.93
Seasonal operating limits		151.40	165.40	156.60	156.60	156.60	154.20
POWER SUPPLY							
Phase/Voltage/Frequency		3P/380-415V/50-60Hz					
PERFORMANCE							
Airflow (HS)	m^3/h	47500	51000	51000	51000	51000	53000
Sound pressure (HS)	dB(A)	66	67	67	67	68	68
INSTALLATION							
Outline dimensions (WxHxD)	mm	980x1690x750 + 1410x1690x750 + 1410x1690x750	1410x1690x750 + 1410x1690x750 + 1410x1690x750				
Package dimensions (WxHxD)	mm	1070x1858x850 + 1515x1858x850 + 1515x1858x850	1515+1858+850 + 1515+1858+850 + 1515+1858+850				
Net weight/Gross weight	kg	257/282 +366/395 + 366/395	366/395 + 366/395 + 366/395				366/395 + 366/395 + 375/404
Compressor Type		Scroll DCI					
Compressor Brand		Mitsubishi Electric					
Compressor Number of compressors		5	6				
Refrigerant/GWP		**R410A/2088**					
Charge	kg	30					
Liquid pipe diameter	inches	3/4"					
Suction pipe diameter	inches	1"1/2					
Suction pipe diameter haut	inches	1"3/8					
Max. length	m	1000					
Max. length (equivalent/actual)	m	260/220					
Max. height between indoor and oudoor units (ODU down/up) (1)	m	110/90					
Standard height between indoor and oudoor units (ODU down/up) (2)	m	50/40					
Max. height between indoor units(3)	m	30					
Standard height between indoor units (4)	m	18					
External static pressure	Pa	110					
Indoor/outdoor unit power ratio (min./max.)	%	50~130					
Maximum number of connectable indoor units	quantity	64					
OPERATING LIMITS							
Cooling mode (min./max.)	°C	-5~50					
Heating mode (min./max.)	°C	-23~21					

(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 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).

TECHNICAL DATA **FOR THREE COMBINATIONS**

MODEL			VVEA-1624R	VVEA-1680R	VVEA-1735R	VVEA-1790R	VVEA-1845R
COMBINATIONS			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
			7VF150016	7VF150016	7VF150016	7VF150017	7VF150017
			VVEA-560R	VVEA-560R	VVEA-615R	VVEA-615R	VVEA-615R
			7VF150016	7VF150016	7VF150017	7VF150017	7VF150017
Phase			*Three phases*				
Power		HP	58	60	62	64	66
COOLING MODE							
Rated power*		**kW**	**162.00**	**168.00**	**172.00**	**176.00**	**180.00**
Rated power input		kW	50.59	51.69	54.46	57.23	60.00
Max. power input		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			3.20	3.25	3.16	3.08	3.00
SEER			5.90	5.90	5.63	5.63	5.63
Seasonal operating limits			233.00	233.00	222.20	222.20	222.20
HEATING MODE							
Rated power*		**kW**	**162.00**	**168.00**	**172.00**	**176.00**	**180.00**
Rated power input		kW	45.24	47.31	49.45	51.59	53.73
Max. power input		kW	84.30	88.20	89.20	90.20	91.20
Rated current		A	74.71	78.13	81.67	85.20	88.74
Max. current		A	139.22	145.66	147.31	148.97	150.62
COP			3.58	3.55	3.48	3.41	3.35
SCOP			3.93	3.93	3.50	3.50	3.50
Seasonal operating limits			154.20	154.20	137.00	137.00	137.00
POWER SUPPLY							
Phase/Voltage/Frequency			3P/380-415V/50-60Hz				
PERFORMANCE							
Airflow (HS)		m^3/h	55000	57000	57000	57000	57000
Sound pressure (HS)		dB(A)	68	68	68	68	69
INSTALLATION							
Outline dimensions (WxHxD)		mm	1410x1690x750 + 1410x1690x750 + 1410x1690x750+				
Package dimensions (WxHxD)		mm	1515+1858+850 + 1515+1858+850 + 1515+1858+850				
Net weight/Gross weight		kg	366/395 + 375/404 + 375/404	375/404 + 375/404 + 375/404			
Compressor	Type		Scroll DCI				
	Brand		Mitsubishi Electric				
	Number of compressors		6				
Refrigerant/GWP			**R410A/2088**				
Charge		kg	30				
Liquid pipe diameter		inches	3/4"				
Suction pipe diameter		inches	1"5/8				
Suction pipe diameter haut		inches	1"1/2				
Max. length		m	1000				
Max. length (equivalent/actual)		m	260/220				
Max. height between indoor and oudoor units (ODU down/up) (1)		m	110/90				
Standard height between indoor and oudoor units (ODU down/up) (2)		m	50/40				
Max. height between indoor units(3)		m	30				
Standard height between indoor units (4)		m	18				
External static pressure		Pa	110				
Indoor/outdoor unit power ratio (min./max.)		%	50~130				
Maximum number of connectable indoor units		quantity	64				
OPERATING LIMITS							
Cooling mode (min./max.)		°C	-5~50				
Heating mode (min./max.)		°C	-23~21				

(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 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).

VVEA
3-pipes with heat recovery

TECHNICAL DATA **FOR FOUR COMBINATIONS**

MODEL			VVEA-1908R	VVEA-1962R	VVEA-2016R	VVEA-2072R	VVEA-2128R	VVEA-2184R
COMBINATIONS			VVEA-450R 7VF150014 VVEA-450R 7VF150014 VVEA-504R 7VF150015 VVEA-504R 7VF150015	VVEA-450R 7VF150014 VVEA-504R 7VF150015 VVEA-504R 7VF150015 VVEA-504R 7VF150015	VVEA-504R 7VF150015 VVEA-504R 7VF150015 VVEA-504R 7VF150015 VVEA-504R 7VF150015	VVEA-504R 7VF150015 VVEA-504R 7VF150015 VVEA-504R 7VF150015 VVEA-560R 7VF150016	VVEA-504R 7VF150015 VVEA-504R 7VF150016 VVEA-560R 7VF150016 VVEA-560R 7VF150016	VVEA-504R 7VF150015 VVEA-560R 7VF150016 VVEA-560R 7VF150016 VVEA-560R 7VF150016
Phase			*Three phases*					
Power		HP	68	70	72	74	76	78
COOLING MODE								
Rated power*		**kW**	**190.00**	**195.00**	**200.00**	**206.00**	**212.00**	**218.00**
Rated power input		kW	60.12	62.32	64.52	65.62	66.72	67.82
Max. power input		kW	107.20	110.60	114.00	117.50	121.00	124.50
Rated current		A	99.29	102.92	106.55	108.37	110.19	112.01
Max. current		A	177.04	182.66	188.27	194.05	199.83	205.61
EER			3.16	3.13	3.10	3.14	3.18	3.21
SEER			6.48	6.48	6.48	5.90	5.90	5.90
Seasonal operating limits			256.20	256.20	256.20	233.00	233.00	233.00
HEATING MODE								
Rated power*		**kW**	**190.00**	**195.00**	**200.00**	**206.00**	**212.00**	**218.00**
Rated power input		kW	50.18	52.49	54.79	56.87	58.94	61.01
Max. power input		kW	96.40	99.20	102.00	105.90	109.80	113.70
Rated current		A	82.88	86.68	90.49	93.91	97.34	100.76
Max. current		A	159.21	163.83	168.45	174.89	181.34	187.78
COP			3.79	3.72	3.65	3.62	3.60	3.57
SCOP			3.99	3.99	3.99	3.93	3.93	3.93
Seasonal operating limits			156.60	156.60	156.60	154.20	154.20	154.20
POWER SUPPLY								
Phase/Voltage/Frequency			3P/380-415V/50-60Hz					
PERFORMANCE								
Airflow (HS)		m^3/h	68000	68000	68000	70000	72000	74000
Sound pressure (HS)		dB(A)	69	69	69	69	69	69
INSTALLATION								
Outline dimensions (WxHxD)		mm	1410x1690x750 + 1410x1690x750 + 1410x1690x750 + 1410x1690x750					
Package dimensions (WxHxD)		mm	1515+1858+850 + 1515+1858+850 + 1515+1858+850 + 1515+1858+850					
Net weight/Gross weight		kg	366/395 + 366/395 + 366/395 + 366/395			366/395 + 366/395 + 366/395 + 375/404	366/395 + 366/395 + 375/404 + 375/404	366/395 + 375/404 + 375/404 + 375/404
Compressor	Type		Scroll DCI					
	Brand		Mitsubishi Electric					
	Number of compressors		8					
Refrigerant/GWP			**R410A/2088**					
Charge		kg	40					
Liquid pipe diameter		inches	7/8"					
Suction pipe diameter		inches	1"3/4					
Suction pipe diameter haut		inches	1"5/8					
Max. length		m	1000					
Max. length (equivalent/actual)		m	260/220					
Max. height between indoor and oudoor units (ODU down/up) (1)		m	110/90					
Standard height between indoor and oudoor units (ODU down/up) (2)		m	50/40					
Max. height between indoor units(3)		m	30					
Standard height between indoor units (4)		m	18					
External static pressure		Pa	110					
Indoor/outdoor unit power ratio (min./max.)		%	50~130					
Maximum number of connectable indoor units		quantity	64					
OPERATING LIMITS								
Cooling mode (min./max.)		°C	-5~50					
Heating mode (min./max.)		°C	-23~21					

(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 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).

TECHNICAL DATA **FOR FOUR COMBINATIONS**

MODEL		VVEA-2240R	VVEA-2295R	VVEA-2350R	VVEA-2405R	VVEA-2460R
COMBINATIONS		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
		7VF150016	7VF150016	7VF150016	7VF150017	7VF150017
		VVEA-560R	VVEA-560R	VVEA-615R	VVEA-615R	VVEA-615R
		7VF150016	7VF150016	7VF150017	7VF150017	7VF150017
		VVEA-560R	VVEA-615R	VVEA-615R	VVEA-615R	VVEA-615R
		7VF150016	7VF150017	7VF150017	7VF150017	7VF150017
Phase		*Three phases*				
Power	HP	80	82	84	86	88
COOLING MODE						
Rated power*	**kW**	**224.00**	**228.00**	**232.00**	**236.00**	**240.00**
Rated power input	kW	68.92	71.69	74.46	77.23	80.00
Max. power input	kW	128.00	129.00	130.00	131.00	132.00
Rated current	A	113.83	118.40	122.97	127.55	132.12
Max. current	A	211.39	213.04	214.70	216.35	218.00
EER		3.25	3.18	3.12	3.06	3.00
SEER		5.90	5.63	5.63	5.63	5.63
Seasonal operating limits		233.00	222.20	222.20	222.20	222.20
HEATING MODE						
Rated power*	**kW**	**224.00**	**228.00**	**232.00**	**236.00**	**240.00**
Rated power input	kW	63.08	65.22	67.36	69.50	71.64
Max. power input	kW	117.60	118.60	119.60	120.60	121.60
Rated current	A	104.18	107.71	111.25	114.78	118.31
Max. current	A	194.22	195.87	197.52	199.17	200.82
COP		3.55	3.50	3.44	3.40	3.35
SCOP		3.93	3.50	3.50	3.50	3.50
Seasonal operating limits		154.20	137.00	137.00	137.00	137.00
POWER SUPPLY						
Phase/Voltage/Frequency		3P/380-415V/50-60Hz				
PERFORMANCE						
Airflow (HS)	m^3/h	76000	76000	76000	76000	76000
Sound pressure (HS)	dB(A)	69	69	70	70	70
INSTALLATION						
Outline dimensions (WxHxD)	mm	1410x1690x750 + 1410x1690x750 + 1410x1690x750 + 1410x1690x750				
Package dimensions (WxHxD)	mm	1515x1858x850 + 1515x1858x850 + 1515x1858x850 + 1515x1858x850				
Net weight/Gross weight	kg	375/404 + 375/404 + 375/404 + 375/404				
Compressor Type		Scroll DCI				
Compressor Brand		Mitsubishi Electric				
Compressor Number of compressors		8				
Refrigerant/GWP		**R410A/2088**				
Charge	kg	40				
Liquid pipe diameter	inches	7/8"			1"	
Suction pipe diameter	inches	1"3/4			2"	
Suction pipe diameter haut	inches	1"5/8			1"3/4	
Max. length	m	1000				
Max. length (equivalent/actual)	m	260/220				
Max. height between indoor and oudoor units (ODU down/up) [1]	m	110/90				
Standard height between indoor and oudoor units (ODU down/up) [2]	m	50/40				
Max. height between indoor units[3]	m	30				
Standard height between indoor units [4]	m	18				
External static pressure	Pa	110				
Indoor/outdoor unit power ratio (min./max.)	%	50~130				
Maximum number of connectable indoor units	quantity	64				
OPERATING LIMITS						
Cooling mode (min./max.)	°C	-5~50				
Heating mode (min./max.)	°C	-23~21				

(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 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).

R410A

VRF
Water condensing

FlowLogic V

WATER FLOWLOGIC
VRF Water condensing

COMPATIBLE

Air Connect Pro

+ PRODUCT

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

RWV06
(optional, see configuration page 58)

RWV09
(optional, see configuration page 59)

FEATURES

TECHNOLOGY

DC INVERTER

INSTALLER FUNCTIONS

SELF DIAGNOSTIC · BMS COMPATIBLE · SERVICE MONITOR TOOL

THE ⊕ "SUSTAINABLE DEVELOPMENT"
> High energy efficiency (COP > 6).
> Energy recovery from water loops.

THE ⊕ "USER"
> 100% indoor application.
> Practical and discreet solution.

THE ⊕ "INSTALLER"
> Stacked installation is possible.
> Up to 300 m of refrigeration network and 50 m height difference.

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

ACCESSORIES

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

See technical draws page 65

TECHNICAL DATA

MODEL			VVWO-220R-01T32	VVWO-280R-01T32	VVWO-335R-01T32
Part number			**7VF150001**	**7VF150002**	**7VF150003**
Phase				*Three phases*	
Power		HP	8	10	12
COOLING MODE					
Rated power*		**kW**	**22.4**	**28**	**33.5**
Rated power input		kW	4.50	6.00	7.70
Max. power input		kW	13.00	15.00	17.00
Rated current		A	7.20	9.60	12.32
Max. current		A	20.79	23.99	27.19
EER			4.98	4.67	4.35
SEER			5.87	5.76	5.69
HEATING MODE					
Rated power*		**kW**	**25**	**31.5**	**37.5**
Rated power input		kW	4.15	5.80	7.80
Max. power input		kW	13.00	15.00	17.00
Rated current		A	6.64	9.28	12.47
Max. current		A	20.79	23.99	27.19
COP			**6.02**	**5.43**	**4.81**
SCOP			**6.13**	**6.01**	**5.96**
POWER SUPPLY					
Phase/Voltage/Frequency				3P/380-415V/50-60Hz	
PERFORMANCE					
Water flow (HS)		m^3/h	4.8	6	7.2
Sound pressure		dB(A)	50	51	53
Sound power level (HS)		dB(A)	61	62	64
INSTALLATION					
Outline dimensions (WxHxD)		mm		775x995x545	
Package dimensions (WxHxD)		mm		840x1150x625	
Net weight/Gross weight		kg		172/183	
Compressor	Type			Scroll DCI	
	Number of compressors		1	1	1
Refrigerant/GWP			**R410A/2088**		
Charge		kg	2	2	2
Liquid pipe diameter		inches	9.52	9.52	12.7
Suction pipe diameter		inches	19.05	22.2	25.4
Oil equalization pipe		inches	9.52	9.52	9.52
Total pipe lenght		m	300	300	300
Max. pipe length (equivalent/actual)		m	150/120	150/120	150/120
Max. height between indoor and oudoor units* (ODU up/down)		m	50/40	50/40	50/40
WATER SIDE					
Inlet water connection pipe		mm	DN32	DN32	DN32
Outlet water connection pipe		mm	DN32	DN32	DN32
Pressure drop (inlet and outlet)		Kpa	35	50	70
Connection type			inner grooved	inner grooved	inner grooved
Max. system water pressure		Mpa	1.6	1.6	1.6
Inlet water temperature range (cooling/heating)		°C	7~45	7~45	7~45
CONNECTION RATIO					
Connectable indoor unit ratio		%	50-130	50-130	50-130
Maximum number of indoor units		nb	13	16	19

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.

MODELS INDOOR UNITS

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

CAPACITY (KBTU/H)	5	7	9	12	16	18	24	28	30	38	48	60	72	96	192	
CAPACITY (HP)	0.5	0.75	1.25	1.5	1.75	2.25	3	3.5	3.75	4.75	6	7	9	12	24	
COOLING MODE (KW)	1.5	2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14	16	22.6	28	56	
HEATING MODE (KW)	1.7	2.5	3.2	4	5	6.3	8	9	10	12.5	16	18	25	31.5	63	73.5
HVVA		•	•	•	•	•	•		•							
CVQA	•	•	•	•	•	•										
CVPA		•	•	•												
CVOA		•	•	•	•	•										
CVTA		•	•	•	•	•	•		•	•	•	•				
FVVA			•	•	•	•	•	•	•	•	•					
DVLA		•	•	•	•											
DVMA	•	•	•	•		•	•	•	•	•	•	•				
DVHA													•	•		
DVFA						•	•		•	•	•		•	•		
XVVA			•	•		•										
AHU connection kit			•	•	•	•	•	•	•	•	•	•	•	•	•	•

HVVA
High wall

RCV03
included

+ PRODUCT

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

RWV05
(optional, see configuration page 61)

RWV03
(optional)

FEATURES

TECHNOLOGY

FUNCTIONS USERS

INSTALLER FUNCTIONS

THE ⊕ "SUSTAINABLE DEVELOPMENT"
> Energy savings (mode locking, setpoint limits).

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

THE ⊕ "INSTALLER"
> Slim design.

THE ⊕ "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						
Cooling mode	kBtu/h	7.50	9.50	12.30	15.30	19.10	24.20	30.70
	kW	**2.20**	**2.80**	**3.60**	**4.50**	**5.60**	**7.10**	**9.00**
Heating mode	kBtu/h	8.50	10.90	13.60	17.10	21.50	27.30	34.10
	kW	**2.50**	**3.20**	**4.00**	**5.00**	**6.30**	**8.00**	**10.00**
ELECTRICAL PARAMETERS						
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						
Outline dimensions (WxHxD)	mm	855x280x208	855x280 x208	1115x336x243	1115x336 x243	1316x365 x270
Package dimensions (WxHxD)	mm	954x355x279	954x355 x279	1206x418x342	1206x418 x342	1403x463 x384
Net weight/Gross weight	kg	9.9/12	9.9/12	15.8/18.9	15.8/18.9	21.8/26.3
Liquid pipe diameter	inches	1/4"	1/4"	1/4"	3/8"	3/8"
Suction pipe diameter	inches	3/8"	1/2"	1/2"	5/8"	5/8"

See technical draws page 66

CVQA

Cassette 600x600

NEW

RWV05
included

THE ✪ "SUSTAINABLE DEVELOPMENT"
> Energy savings (mode locking, setpoint limits).

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

THE ✪ "INSTALLER"
> Easy integration into false ceilings thanks to its reduced height.
> Simple installation thanks to its integrated condensates pump.

THE ✪ "TECHNOLOGY"
> Optimal regulation thanks to its electronic expansion valve.
> Individual opening of each flap.

TECHNICAL DATA

INDOOR UNIT		CVQA-025/022/015N-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
	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	430/540/650			480/590/700		
Sound pressure (LS/MS/HS)	dB(A)	29/30/32			29/30/33		29/30/34
Sound power level (LS/MS/HS)	dB(A)	43/44/46			43/44/47		44/46/48
INSTALLATION							
Outline dimensions (WxHxD)	mm	580x260x580					
Package dimensions (WxHxD)	mm	718x380x680					
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		**7ACVF0601**					
Outline dimensions (WxHxD)	mm	620x60x620					
Package dimensions (WxHxD)	mm	660x115x660					

See technical draws page 67

✚ PRODUCT

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

RCV03
(optional)

RWV03
(optional)

FEATURES

TECHNOLOGY

AIR QUALITY / CLEAN

FUNCTIONS USERS

INSTALLER FUNCTIONS

CVPA

1-way cassette

RWV05
included

✚ PRODUCT

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

RCV03
(optional)

RWV03
(optional)

FEATURES

TECHNOLOGY

USER FUNCTIONS

INSTALLER FUNCTIONS

✚ "SUSTAINABLE DEVELOPMENT"
> Energy savings (mode blocking, setpoint limiting).

✚ "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-025/022N-01M22		CVPA-035N-01M22
Part number		**7VF040004**		**7VF040003**
Phase		*Single phase*		
RATED POWER				
Cooling mode	kBtu/h	7.50	9.60	12.30
	kW	**2.20**	**2.80**	**3.60**
Heating mode	kBtu/h	8.50	10.90	13.60
	kW	**2.50**	**3.20**	**4.00**
ELECTRICAL PARAMETERS				
Phase/Voltage/Frequency		1P/220-240V/50-60Hz		
PERFORMANCES				
Airflow (LS/MS/HS)	m^3/h	450/490/530		490/530/550
Sound pressure (LS/MS/HS)	dB(A)	24/29/32		25/30/34
Sound power level (LS/MS/HS)	dB(A)	38/43/46		39/44/48
INSTALLATION				
Outline dimensions (WxHxD)	mm	875x185x505		
Package 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"		
PANEL				
Panel part number		**7ACVFH004**		
Outline dimensions (WxHxD)	mm	1050x122x560		
Package dimensions (WxHxD)	mm	1133x197x623		
Net weight/Gross weight	kg	5.3/8.3		

See technical draws page 67

CVOA

2-ways cassette

RWV05
included

“SUSTAINABLE DEVELOPMENT”
> Energy savings (mode blocking, setpoint limiting).

“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.

+ PRODUCT

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

RCV03
(optional)

RWV03
(optional)

FEATURES

TECHNOLOGY

USER FUNCTIONS

INSTALLER FUNCTIONS

TECHNICAL DATA

INDOOR UNIT		CVOA-025N-01M22	CVOA-035N-01M22	CVOA-050/040-01M22	
Part number		**7VF040005**	**7VF040006**	**7VF040007**	
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	13.60	17.10	21.50
	kW	**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	550/700/840			
Sound pressure (LS/MS/HS)	dB(A)	33/37/42		34/39/44	
Sound power level (LS/MS/HS)	dB(A)	46/50/55		47/52/57	
INSTALLATION					
Outline dimensions (WxHxD)	mm	817x220x620			
Package dimensions (WxHxD)	mm	1015x278x695			
Net weight/Gross weight	kg	21/23			
Liquid pipe diameter	inches	1/4”			
Suction pipe diameter	inches	3/8”	1/2”		

PANEL

Panel part number		7ACVFH005
Outline dimensions (WxHxD)	mm	1055x68x680
Package dimensions (WxHxD)	mm	1110x161x720
Net weight/Gross weight	kg	7/8

See technical draws page 68

CVTA

360° cassette

RWV05
included

+ PRODUCT

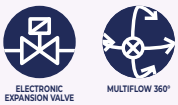
- RWV05 remote control included (see page 61)
- 360° air blowing
- New DC Inverter fan motor
- Integrated condensates pump
- Extra-slim cassette
- Fresh air inlet
- Dry contact available

RCV03
(optional)

RWV03
(optional)

FEATURES

TECHNOLOGY



AIR QUALITY / CLEAN

FUNCTIONS USERS

INSTALLER FUNCTIONS

THE ⊕ "SUSTAINABLE DEVELOPMENT"

> Energy savings (mode locking, setpoint limits).

THE ⊕ "USER"

> 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 ⊕ "INSTALLER"

> Simple installation (180 mm high).

THE ⊕ "TECHNOLOGY"

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

TECHNICAL DATA

INDOOR UNIT		CVTA-025/022N-01M22		CVTA-035N-01M22	CVTA-050/045N-01M22		CVTA-070N-01M22	CVTA-110/090N-01M22		CVTA-160/140N-01M22	
Part number		**7VF040008**		**7VF040009**	**7VF040010**		**7VF040011**	**7VF040012**		**7VF040013**	
Phase		*Single phase*									
RATED POWER											
Cooling mode	kBtu/h	7.50	9.50	12.30	15.30	19.10	24.20	30.70	38.20	47.70	54.60
	kW	**2.20**	**2.80**	**3.60**	**4.50**	**5.60**	**7.10**	**9.00**	**11.20**	**14.00**	**16.00**
Heating mode	kBtu/h	8.50	10.90	13.60	17.10	21.50	27.30	34.10	42.60	54.60	61.20
	kW	**2.50**	**3.20**	**4.00**	**5.00**	**6.30**	**8.00**	**10.00**	**12.50**	**16.00**	**18.00**
ELECTRICAL PARAMETERS											
Phase/Voltage/ Frequency		1P/220-230V/50-60Hz									
PERFORMANCES											
Airflow (LS/MS/HS)	m^3/h	620/810/1000					1000/ 1190/ 1380	1670/1860/2050		1720/1910/2100	
Sound pressure (LS/MS/HS)	dB(A)	25/27/30			27/29/ 32	29/30/ 33	31/34/ 35	31/35/37		36/40/44	
Sound power level (LS/MS/HS)	dB(A)	-			41/43/46	43/44 /47	45/48 /49	45/49/51		50/54/58	
INSTALLATION											
Outline dimensions (WxHxD)	mm	840x183x840					840 x204 x840	840x204x840		840x288x840	
Package dimensions (WxHxD)	mm	983x268x983					983 x290 x983	983x331x983		983x373x983	
Net weight/Gross weight	kg	25/28					27/30	31/36		33/38	
Liquid pipe diameter	inches	1/4"					3/8"				
Suction pipe diameter	inches	3/8"		1/2"			5/8"				
PANEL											
Panel part number		**7ACVH003**									
Outline dimensions (WxHxD)	mm	950x50x950									
Package dimensions (WxHxD)	mm	1013x123x1025									
Net weight/Gross weight	kg	6.5/9									

See technical draws page 68

FVVA
Floor ceiling

NEW

RWV05
included

THE ✚ "SUSTAINABLE DEVELOPMENT"
> Energy savings (mode locking, setpoint limits).

THE ✚ "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 ✚ "INSTALLER"
> Horizontal or vertical installation.

THE ✚ "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		*Single phase*								
RATED POWER										
Cooling mode	kBtu/h	9.50	12.28	15.35	19.11	24.23	27.30	30.71	38.21	48.00
	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	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	35/38/42		41/44/ 46	41/44/47		43/46/50	
Sound power level (LS/MS/HS)	dB(A)	47/50/ 52	47/50/ 52	48/51/55		54/58/ 60	54/58/61		57/60/63	
INSTALLATION										
Outline dimensions (WxHxD)	mm	1000 x680 x230	1000x680x230			1325x680x230			1650x680x230	
Package dimensions (WxHxD)	mm	1100 x779 x305	1100x779x305			1425x779x305			1750x779x305	
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"				3/8"				
Suction pipe diameter	inches	3/8"	1/2"			5/8"				

See technical draws page 69

✚ 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

RCV03
(optional)

RWV03
(optional)

FEATURES

TECHNOLOGY

FUNCTIONS USERS

INSTALLER FUNCTIONS

DVLA

Low-pressure ducted

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

RCV03
(optional)

RWV03
(optional)

FEATURES

TECHNOLOGY

AIR QUALITY / CLEAN

FUNCTIONS USERS

INSTALLER FUNCTIONS

THE ⊕ "SUSTAINABLE DEVELOPMENT"

> Energy savings (mode locking, setpoint limits).

THE ⊕ "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 ⊕ "INSTALLER"

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

THE ⊕ "TECHNOLOGY"

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

TECHNICAL DATA

INDOOR UNIT			DVLA-025/022/015-01M22		DVLA-035-01M22	DVLA-045-01M22
Part number			**7VF030003**		**7VF030004**	**7VF030005**
Phase			*Single phase*			
RATED POWER						
Cooling mode		kBtu/h	5.10	7.50	9.50	12.30	15.30
		kW	**1.50**	**2.20**	**2.80**	**3.60**	**4.50**
Heating mode		kBtu/h	5.80	8.50	10.90	13.60	17.10
		kW	**1.70**	**2.50**	**3.20**	**4.00**	**5.00**
ELECTRICAL PARAMETERS						
Phase/Voltage/Frequency			1P/220-230V/50-60Hz			
PERFORMANCES						
Airflow (LS/MS/HS)		m^3/h	310/370/430	360/420/480	370/430/550	460/540/600
Sound pressure (LS/MS/HS)		dB(A)	19/22/26	20/23/27	24/27/30	26/29/32
Sound power level (LS/MS/HS)		dB(A)	33/36/40	34/37/41	38/41/44	40/43/46
INSTALLATION						
Outline dimensions (WxHxD)		mm	850x185x420		850x185x420	850x185x420
Package dimensions (WxHxD)		mm	1045x270x540		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			
PANEL						
Panel part number			**7ACVF0587**			
Dimensions (LxHxP)	Supply	mm	890x100x190			
	Return	mm	890x291x32.4			
Package dimensions (WxHxD)		mm	938x335x220			
Net weight/Gross weight		kg	4/5			

See technical draws page 70

DVMA
Medium-pressure ducted

NEW

RWV05
included

THE ✚ "SUSTAINABLE DEVELOPMENT"
> Energy savings (mode locking, setpoint limits).

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

THE ✚ "INSTALLER"
> Ease of installation thanks to its small dimensions.
> Integrated condensates pump.

THE ✚ "TECHNOLOGY"
> Optimal regulation thanks to its electronic expansion valve.
> Adaptability to the ventilation network thanks to its adjustable static pressure.

TECHNICAL DATA

INDOOR UNIT		DVMA-080/070/050N-01M22			DVMA-090N-01M22	DVMA-110N-01M22	DVMA-160/140N-01M22	
Part number		**7VF030013**			**7VF030014**	**7VF030015**	**7VF030016**	
Phase		*Single phase*						
RATED POWER								
Cooling mode	kBtu/h	19.10	24.20	27.30	30.70	38.20	47.80	54.60
	kW	**5.60**	**7.10**	**8.00**	**9.00**	**11.20**	**14.00**	**16.00**
Heating mode	kBtu/h	21.50	27.30	30.70	34.10	44.40	55.60	61.40
	kW	**6.30**	**8.00**	**9.00**	**10.00**	**13.00**	**16.30**	**18.00**
ELECTRICAL PARAMETERS								
Phase/Voltage/ Frequency		1P/220-240V/50-60Hz						
PERFORMANCES								
Airflow (LS/MS/HS)	m³/h	640/765/ 915	875/1050/1275		1400/ 1700/2000	1400/ 1750/2150	1600/ 1950/2350	1600/ 1950/2350
Sound pressure (LS/MS/HS)	dB(A)	29/31/33	29/31/34	30/33/35	32/35/38	32/36/40	34/38/42	34/38/42
Sound power level (LS/MS/HS)	dB(A)	41/43/45	41/43/46	42/45/47	44/47/50	44/48/52	46/50/54	46/50/54
INSTALLATION								
Outline dimensions (WxHxD)	mm	1100x248x700				1500x248x700		
Package dimensions (WxHxD)	mm	1332x280x835				1698x305x857		
Net weight/Gross weight	kg	36.8/43.4			39.4/45.4	48.3/56.5	51.3/59.5	
Liquid pipe diameter	inches	1/4"	3/8"					
Suction pipe diameter	inches	1/2"	5/8"					
External static pressure (standard/max.)	Pa	20/200			20/180			

See technical draws page 71

✚ 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

RCV03
(optional)

RWV03
(optional)

FEATURES

TECHNOLOGY
ELECTRONIC EXPANSION VALVE

AIR QUALITY / CLEAN
FRESH AIR

FUNCTIONS USERS
I FEEL · SUPER QUIET · PROGRAMMABLE TIMER · AUTO RESTART (MEMORY)

INSTALLER FUNCTIONS
INTEGRATED CONDENSATES PUMP · DRY CONTACT ON/OFF

DVHA
High-pressure ducted

RWV05
included

✚ PRODUCT

- RWV05 remote control included (see page 61)
- High static pressure and airflow 4050 m³/h
- High power from 5.6 to 28 kW
- Dry contact available

RCV03
(optional)

RWV03
(optional)

FEATURES

TECHNOLOGY

ELECTRONIC EXPANSION VALVE

FUNCTIONS USERS

I FEEL — PROGRAMMABLE TIMER — AUTO RESTART (MEMORY)

INSTALLER FUNCTIONS

DRY CONTACT ON/OFF

THE ⊕ "SUSTAINABLE DEVELOPMENT"
> Energy savings (mode locking, setpoint limits).

THE ⊕ "USER"
> Static pressure up to 300 Pa to adapt to any type of ventilation network.

THE ⊕ "INSTALLER"
> Possible installation on textile duct.

THE ⊕ "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		**7VF030017**	
Phase		*Single phase*	
RATED POWER			
Cooling mode	kBtu/h	77.10	95.50
	kW	**22.60**	**28.00**
Heating mode	kBtu/h	86.00	107.50
	kW	**25.20**	**31.50**
ELECTRICAL PARAMETERS			
Phase/Voltage/Frequency		1P/220-240V/50-60Hz	
PERFORMANCES			
Airflow (TPV/LS/MS/HS)	m³/h	2700/3200/3600/4000	3300/3700/4100/4500
Sound pressure (TPV/LS/MS/HS)	dB(A)	46/48/50/53	47/49/51/54
Sound power level (TPV/LS/MS/HS)	dB(A)	60/62/64/67	61/63/65/68
INSTALLATION			
Outline dimensions (WxHxD)	mm	1333x750x497	
Package dimensions (WxHxD)	mm	1558x896x668	
Net weight/Gross weight	kg	87/109	
Liquid pipe diameter	inches	1/2"	
Suction pipe diameter	inches	7/8"	
External static pressure (standard/max.)	Pa	100/300	

See technical draws page 72

DVFA

High-pressure ducted fresh air

RWV05
included

THE ✪ "USER"
> 100% fresh air inlet.

THE ✪ "INSTALLER"
> Installation compatible to all types of ducting network.

THE ✪ "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		**7VF030019**	**7VF030018**	
Phase		*Single phase*		
RATED POWER				
Cooling mode	kBtu/h	47,70	77,10	95,50
	kW	**14,00**	**22,60**	**28,00**
Heating mode	kBtu/h	34,10	68,20	83,50
	kW	**10,00**	**20,00**	**24,50**
ELECTRICAL PARAMETERS				
Phase/Voltage/Frequency		1P/220-240V/50-60Hz		
PERFORMANCES				
Airflow (TPV/LS/MS/HS)	m³/h	1200/1460/1600/1900	1500/1800/2300/2800	2000/2400/2800/3200
Sound pressure (TPV/LS/MS/HS)	dB(A)	42/44/46/48	42/44/46/48	42/45/47/49
Sound power level (TPV/LS/MS/HS)	dB(A)	55/57/59/61	55/57/59/61	55/58/60/62
INSTALLATION				
Outline dimensions (WxHxD)	mm	1500x248x700	1333x497x750	
Package dimensions (WxHxD)	mm	1698x305x857	1558x668x896	
Net weight/Gross weight	kg	45.4/52.6	88/110	
Liquid pipe diameter	inches	3/8"	1/2"	
Suction pipe diameter	inches	5/8"	1"	
External static pressure	Pa	100/200	100/350	

See technical draws page 73

✚ PRODUCT

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

RCV03
(optional)

RWV03
(optional)

FEATURES

TECHNOLOGY

AIR QUALITY / CLEAN

FUNCTIONS USERS

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

ELECTRONIC EXPANSION VALVE

FUNCTIONS USERS

I FEEL · SUPER QUIET · PROGRAMMABLE TIMER · AUTO RESTART (MEMORY)

INSTALLER FUNCTIONS

DRY CONTACT ON/OFF

THE + "SUSTAINABLE DEVELOPMENT"
> Energy savings (mode locking, setpoint limits).

THE + "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 + "INSTALLER"
> Very compact.
> Ideal solution for rooms with low ceilings.

THE + "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	15,30	17,00
	kW	**2,80**	**3,60**	**4,50**	**5,00**
Heating mode	kBtu/h	10,90	13,60	17,00	18,50
	kW	**3,20**	**4,00**	**5,00**	**5,50**
ELECTRICAL PARAMETERS					
Phase/Voltage/Frequency		1P/220-230V/50-60Hz			
PERFORMANCES					
Airflow (TPV/LS/MS/HS/TGV)	m³/h	270/310/390/460/540	270/350/420/500/580	270/390/460/540/620	
Sound pressure (TPV/LS/MS/HS/TGV)	dB(A)	30/33/38/42/45	30/36/40/44/47	30/38/42/45/48	
Sound power level (TPV/LS/MS/HS/TGV)	dB(A)	45/48/52/55/58	47/51/54/57/60	42/48/55/58/61	
INSTALLATION					
Outline dimensions (WxHxD)	mm	700x600x210			
Package dimensions (WxHxD)	mm	783x695x303			
Net weight/Gross weight	kg	15.2/18.7			
Liquid pipe diameter	inches	1/4"			
Suction pipe diameter	inches	1/2"			

See technical draws page 73

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.

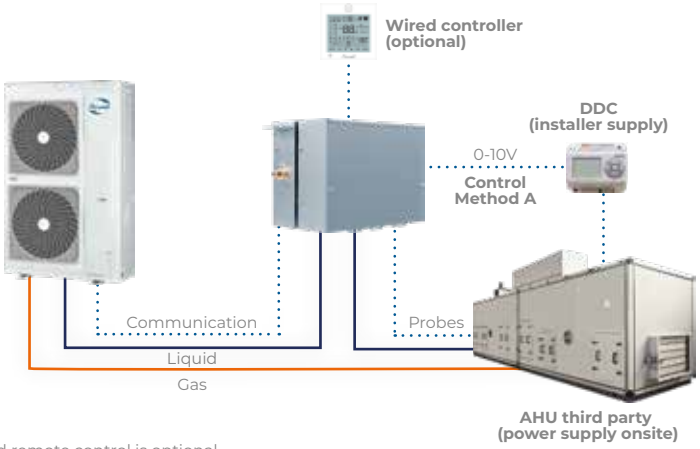
SYSTEM APPLICATION

- 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 m³/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**

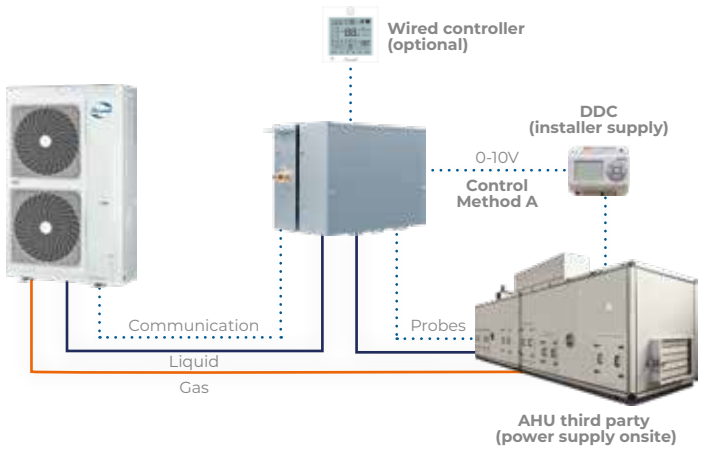
> DDC 0-10V signal output.
> The AHU kit receives a 0-10V signal to adjust the capacity of the ODU.



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.



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.

✚ 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.

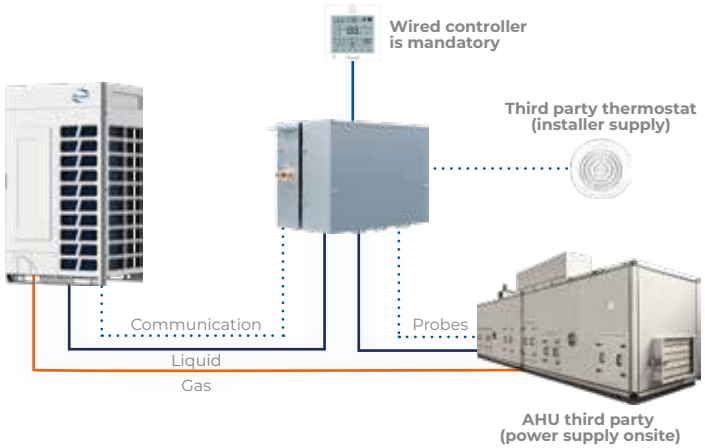

Buildings


Shopping center


Hospital

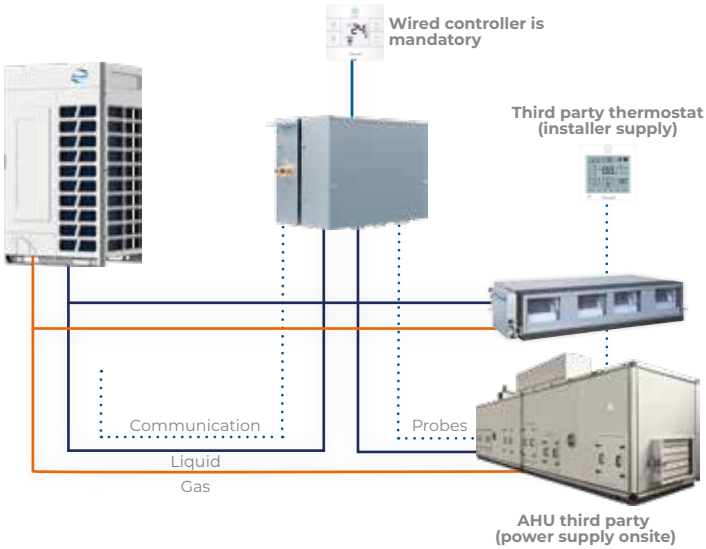
CONTROL MODE **C** (special application)

- 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

SEE AS WELL

COMPATIBILITY TABLES

VRF

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

● Standard remote ● Optional remote

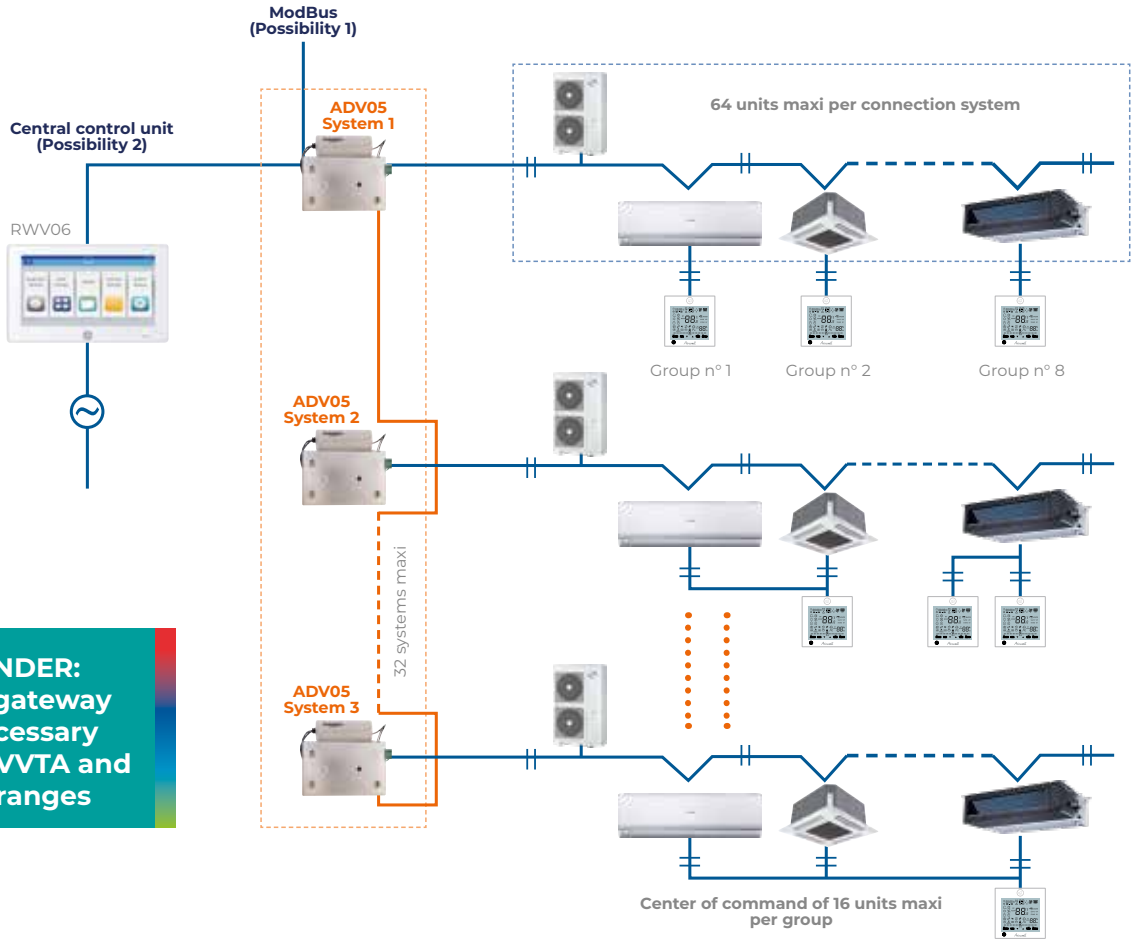
FUNCTION TABLES

VRF

MODEL	WIRED REMOTE CONTROL			
REFERENCE	RWV03	RWV05	RWV06	RWV09
Part number	7ACELH032	7ACELH039	7ACELH023	7ACELH038
Picture				
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	●	●	●	●
Wi-Fi compatibility				●
INSTALLER FUNCTIONS				
Technician test mode				
Group control	●	●	●	●
Centralized control			●	●
Heating mode only		●	●	●
Operating fault display	●	●	●	●

ADV05
Central control solutions

Only one gateway:
CENTRAL CONTROL OR MODBUS



REMINDER:
ADV05 gateway not necessary with the VVTA and VVEA ranges

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

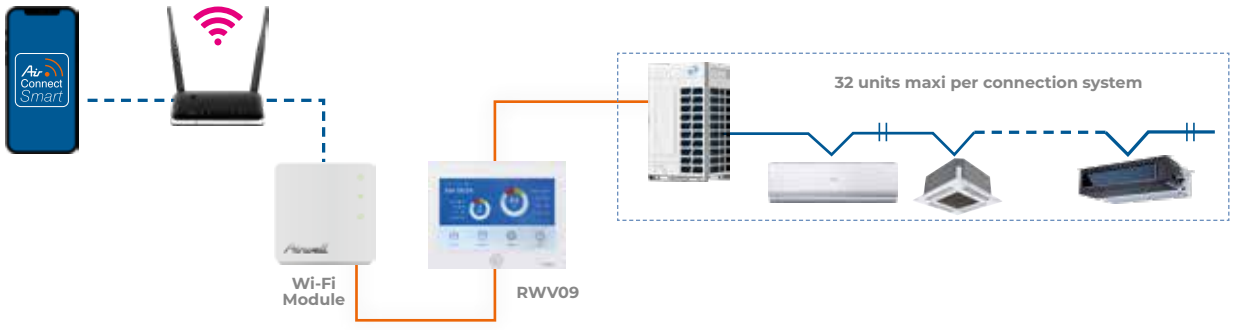
CONTROL UNIT **RWV09** (up to 64 indoor units)

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

- Wi-Fi 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.

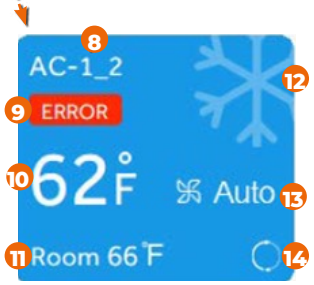
Main features:

- 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 Wi-Fi module or a third-party device.



Main interface

Control of internal parameters



Display of the indoor units parameters

1	Current number of indoor units. By default, all existing indoor units are displayed, you can drag them up or down to view them. You can click on the second icon below to select the indoor units you want to view.
2	**Time.** You can set the time through “HOME-SETTING-TIME”.
3	Click to return to the home page.
4	Click to select the indoor units you want to view.
5	Icon display interface.
6	List display interface.
7	Click to display the checklist.
8	AC-1_2: represents the gateway addressed as NO.1, and its central address is NO.2.
9	If there is an error in progress, the icon is displayed.
10	Set temperature.
11	Current room temperature.
12	THE CURRENT MODE IS "COOLING".
13	Current fan speed is "AUTO".
14	Current control mode is "LAST IN FIRST OUT". (last in, first out).

PART NUMBER: 7ACELH038

RCV03

Infrared remote control

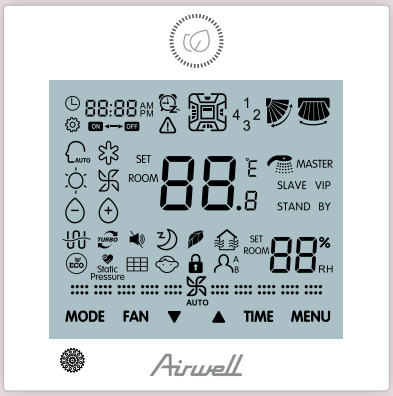
FUNCTIONS

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

RWV05
Wire controller

FUNCTIONS

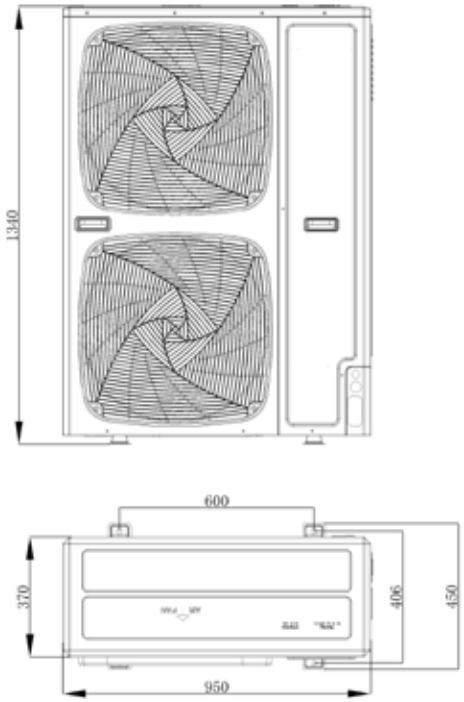
MODEL		RWV05
Part number		**7ACELH039**
Fonction de base	• *On/off*	•
	• *Adjusting the setpoint temperature*	•
	• *Fan speed selection*	•
	• *Selecting the operating mode*	•
	• *Airflow adjustment*	•
Display	• *Clock*	•
	• *Temperature display*	•
	• *Humidity level display*	•
Function	• *Individual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



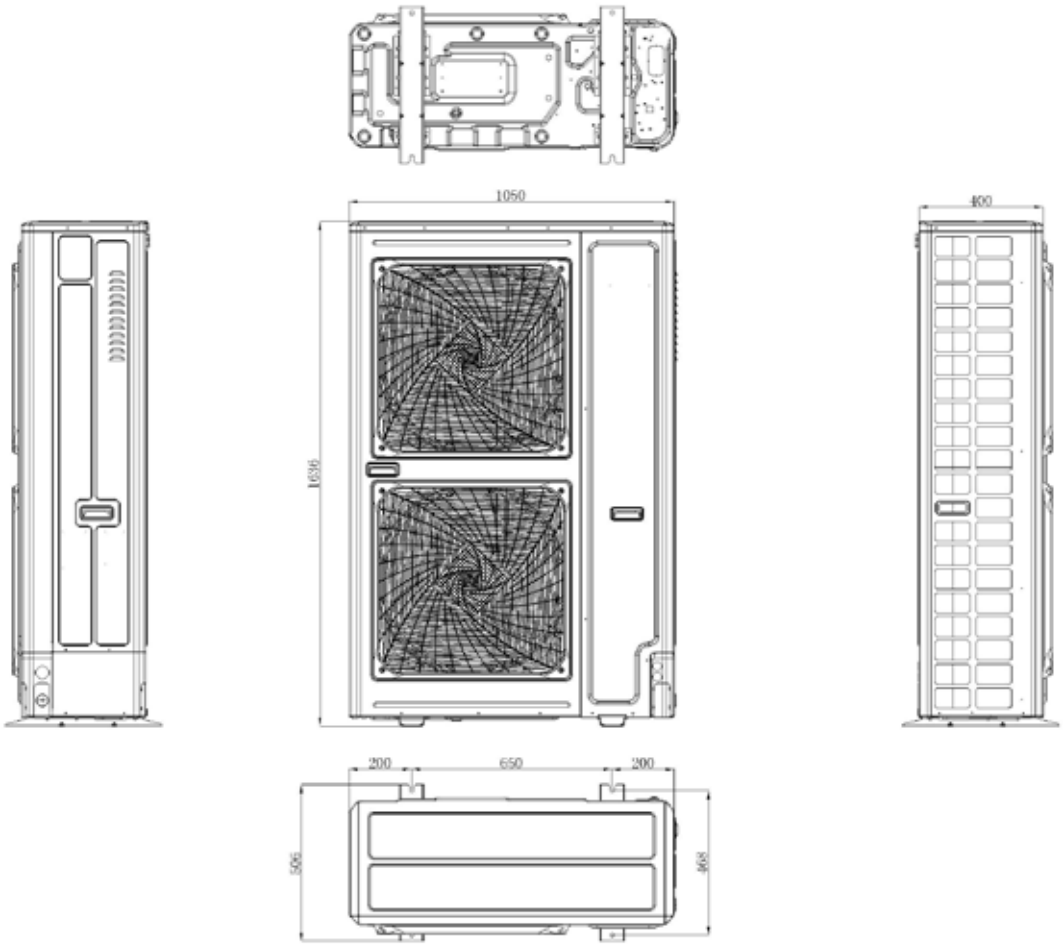
Outdoor units

VVFA - 2-pipes - Front discharge system

VVFA 125R/150R

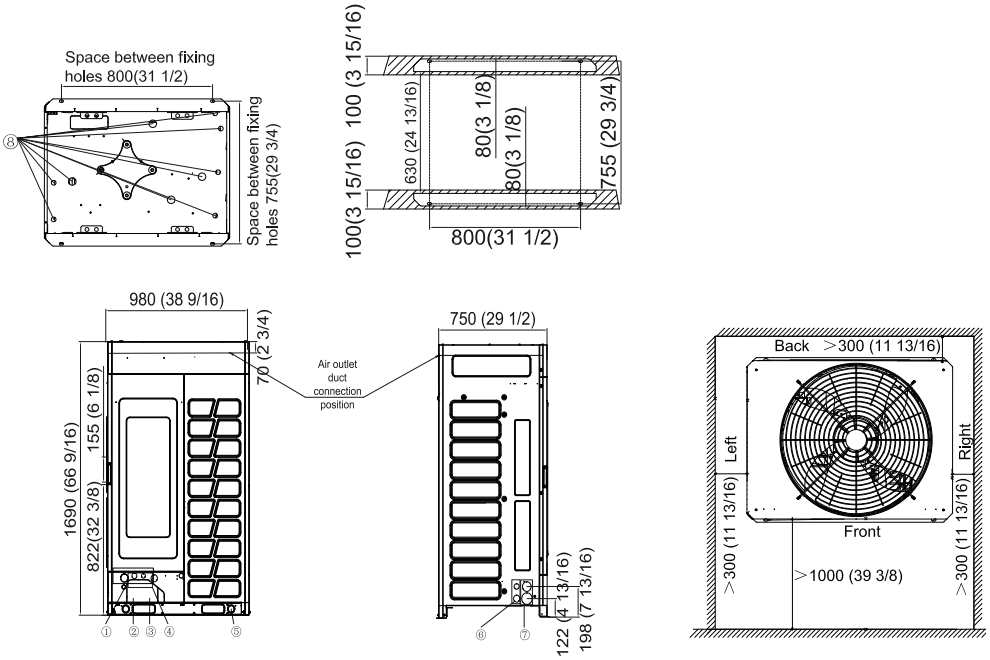


VVFA 220R/335R

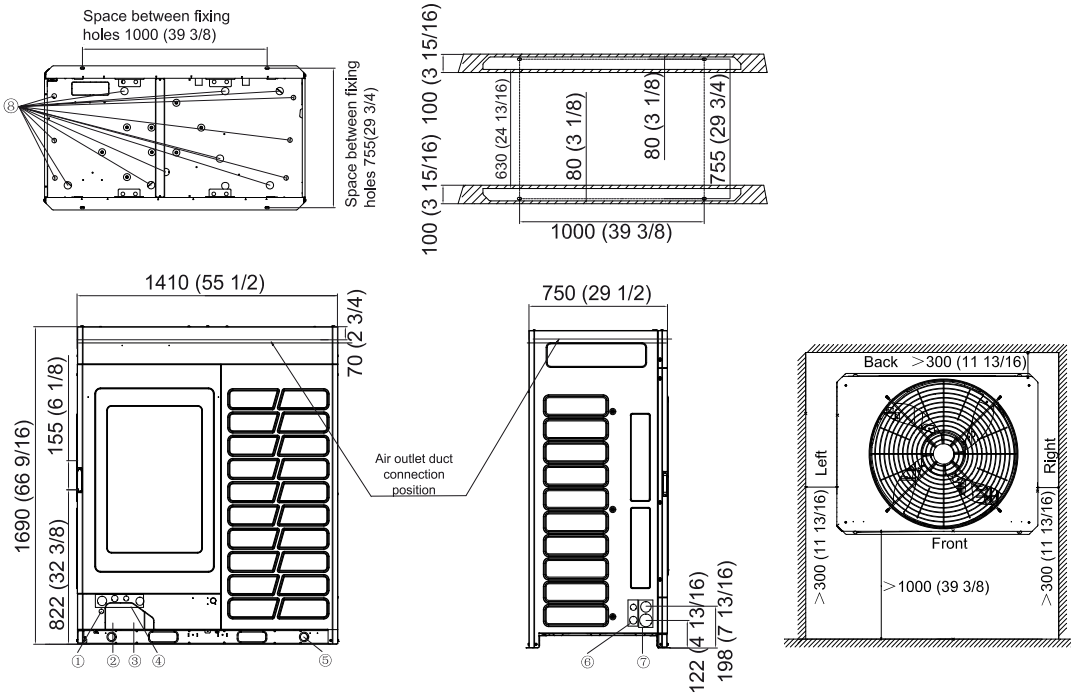


VVTA - 2-pipes - Top discharge system

VVTA 250R/450R



VVTA 504R/735R



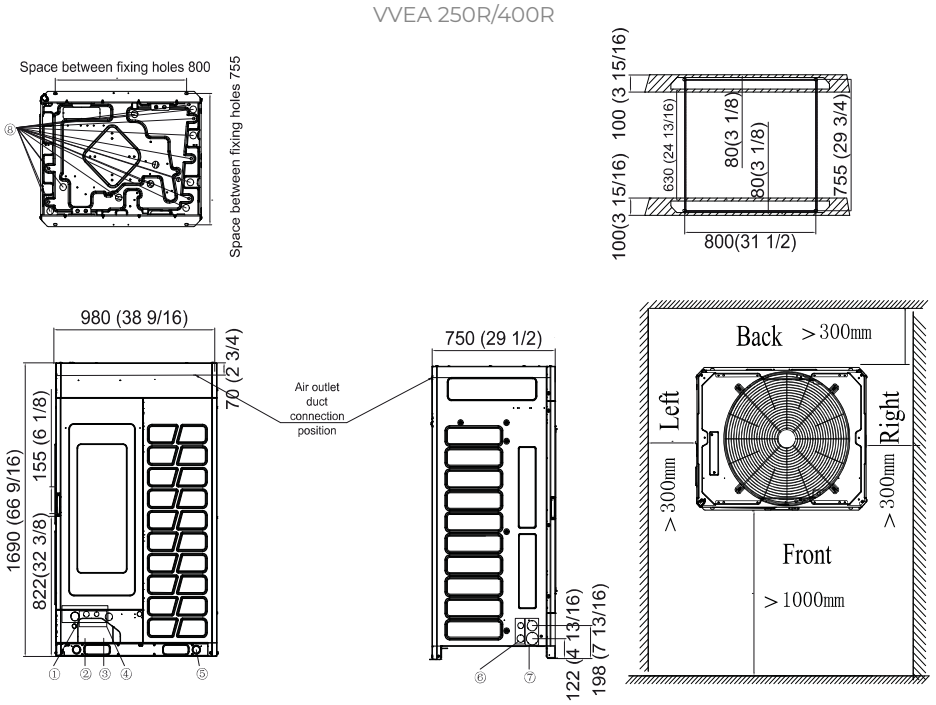
DESCRIPTIONS

N°	NAME	REMARQUE
1	Signal line hole Ø25 mm	Using the rubber plug in the unit's attachment for protection
2	Pipe outlet for 2-pipe system	
3	Pipe outlet for 3-pipe system	
4	Power supply hole	According to the wire diameter size to choose the appropriate line hole, and using the line sheath in the unit's attachment for protection.
5	Hoisting hole	
6	Power supply of signal line hole	
7	Refrigerant pipe outlet	
8	Drain hole	

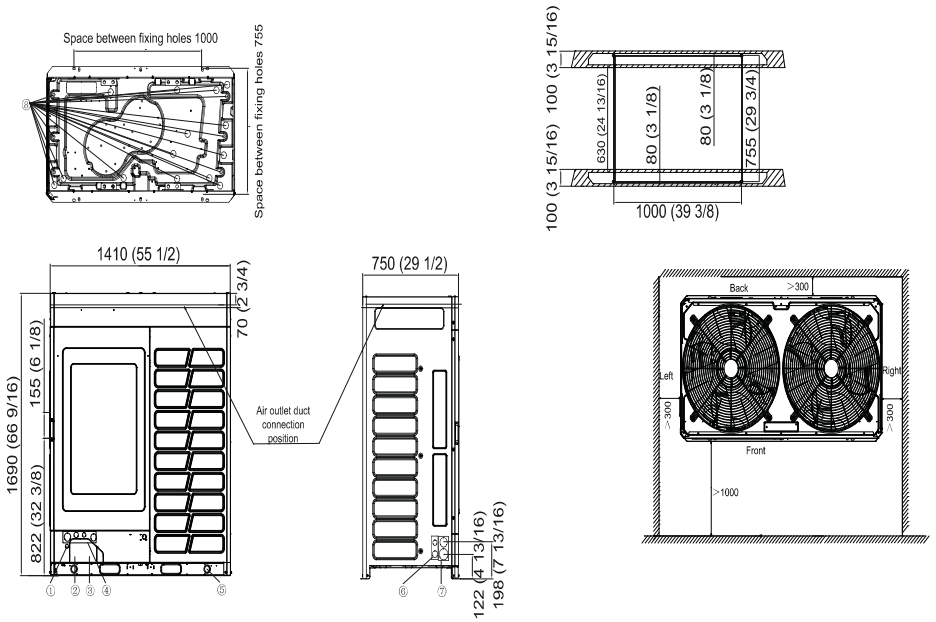
Outdoor units

VVEA - 3-pipes with heat recovery

VVEA 250R/400R



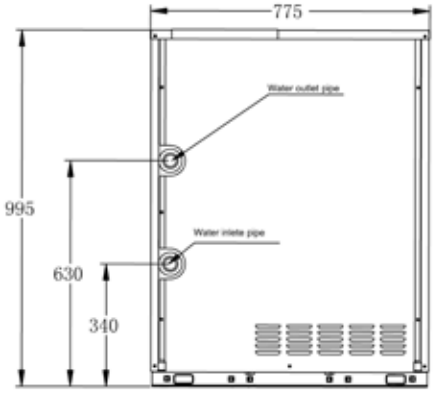
VVEA 450R/615R

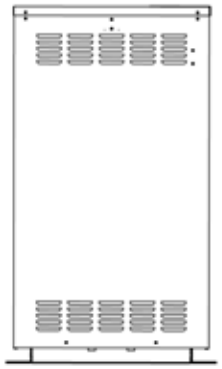


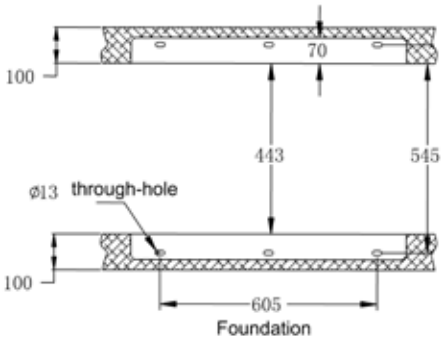
DESCRIPTIONS

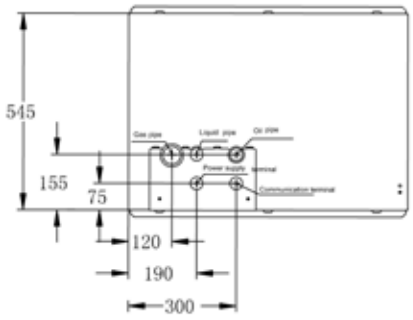
N°	NAME	REMARQUE
1	Signal line hole Ø25 mm	Using the rubber plug in the unit's attachment for protection
2	Pipe outlet for 2-pipe system	
3	Pipe outlet for 3-pipe system	
4	Power supply hole	According to the wire diameter size to choose the appropriate line hole, and using the line sheath in the unit's attachment for protection.
5	Hoisting hole	
6	Power supply of signal line hole	
7	Refrigerant pipe outlet	
8	Drain hole	

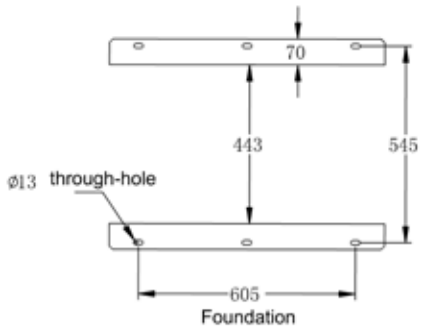
WATER FLOWLOGIC - VRF Water condensing









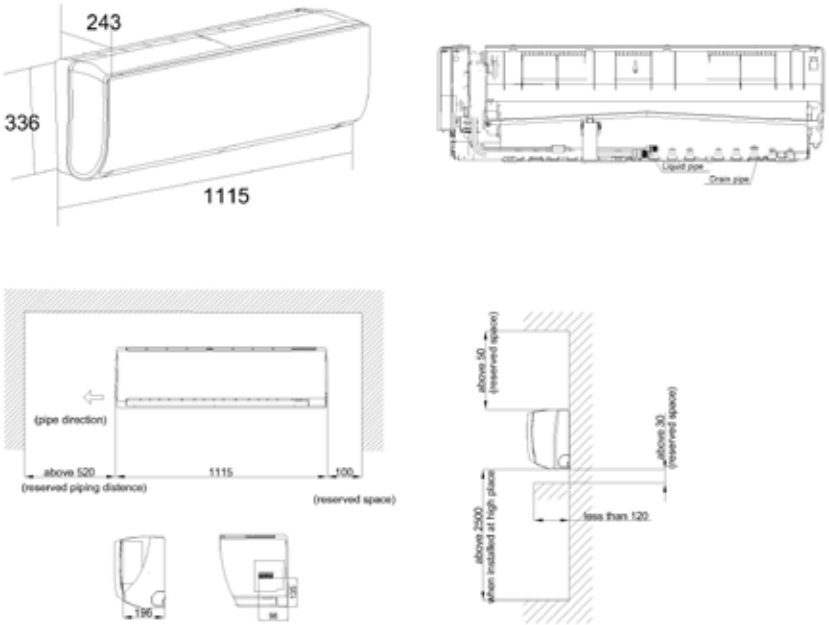


Indoor units

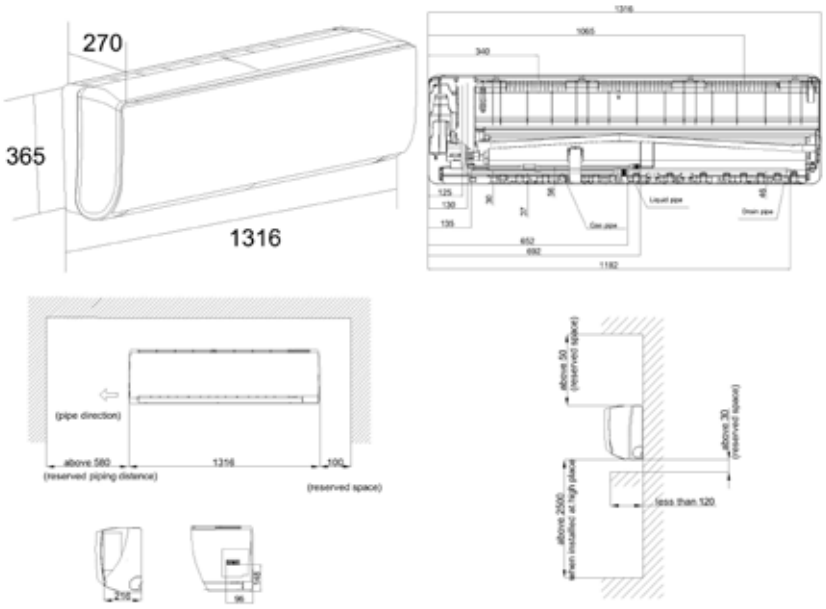
HVVA - High wall

HVVA 022N-035N

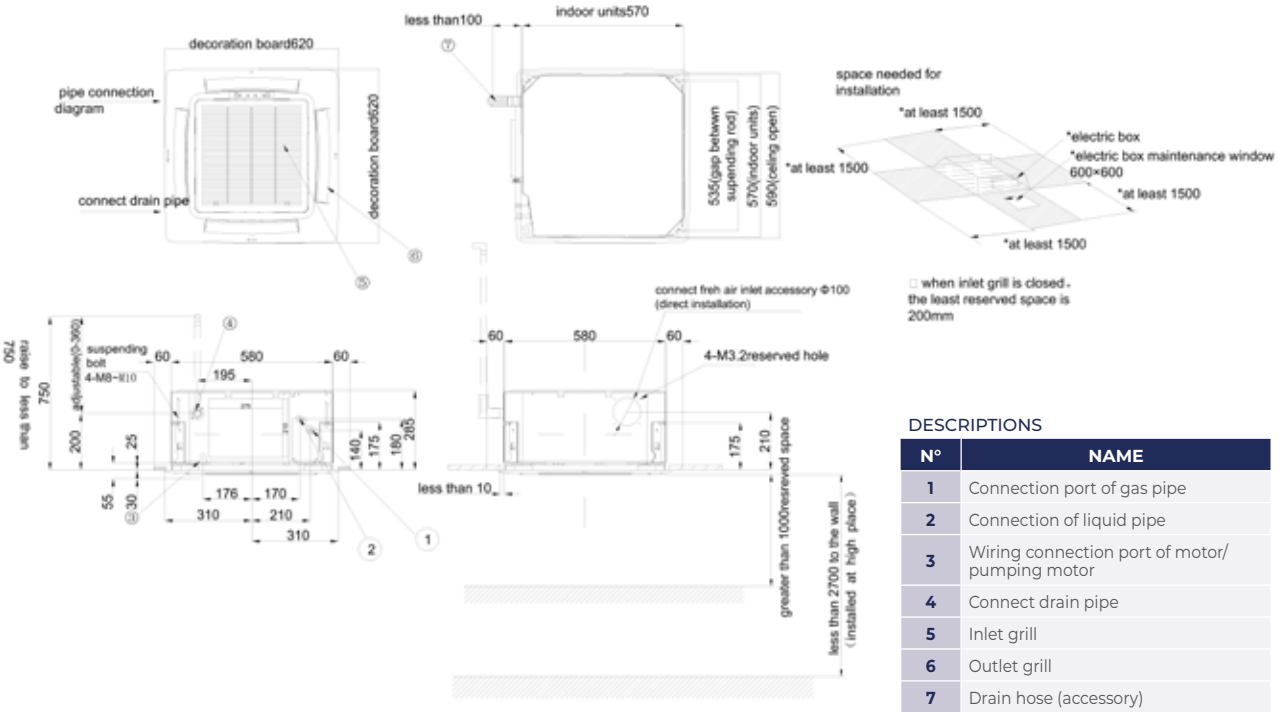
HVVA 045N-070N



HVVA 090N



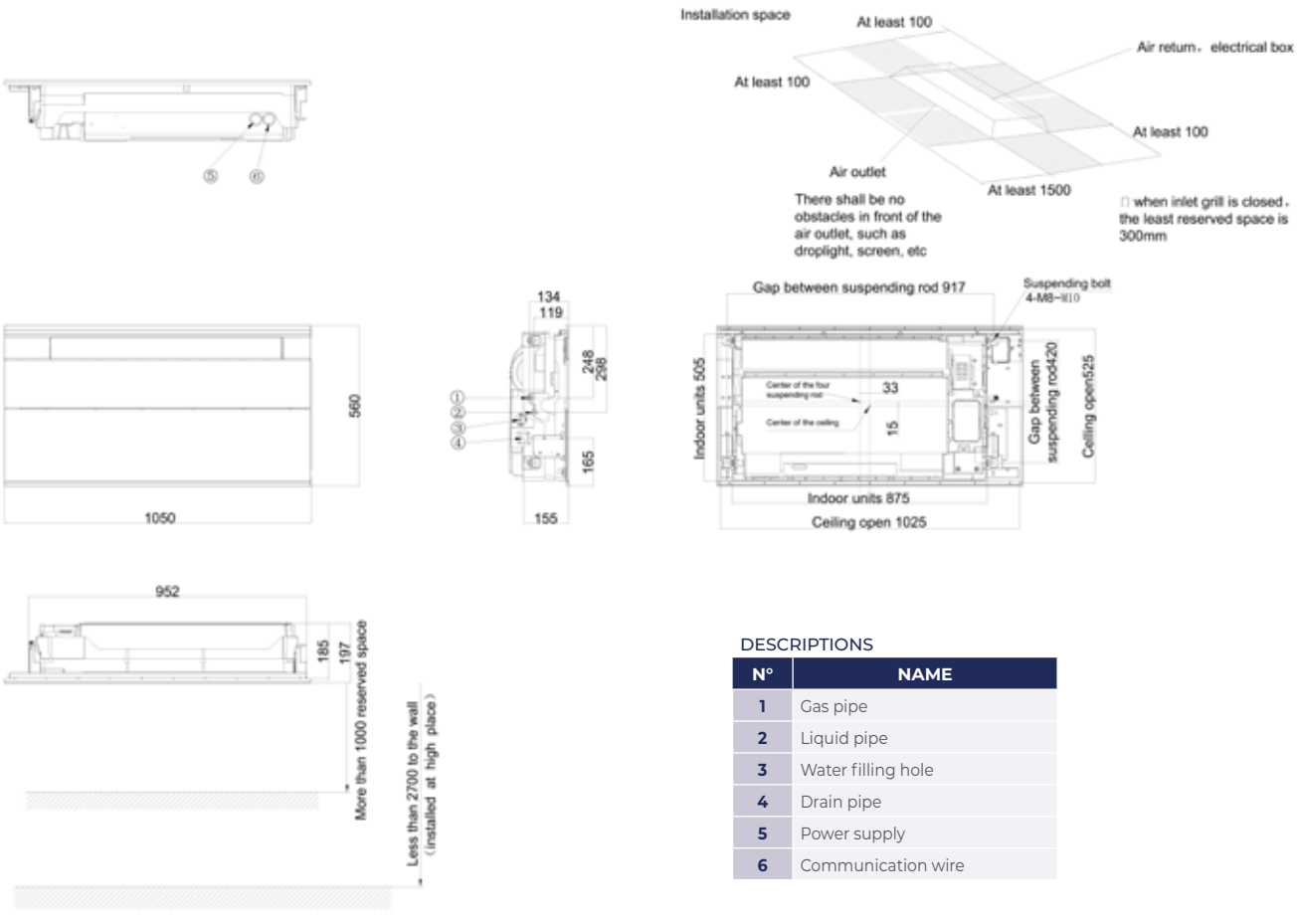
CVQA - Cassette 600x600



DESCRIPTIONS

N°	NAME
1	Connection port of gas pipe
2	Connection of liquid pipe
3	Wiring connection port of motor/ pumping motor
4	Connect drain pipe
5	Inlet grill
6	Outlet grill
7	Drain hose (accessory)

CVPA - 1-way cassette

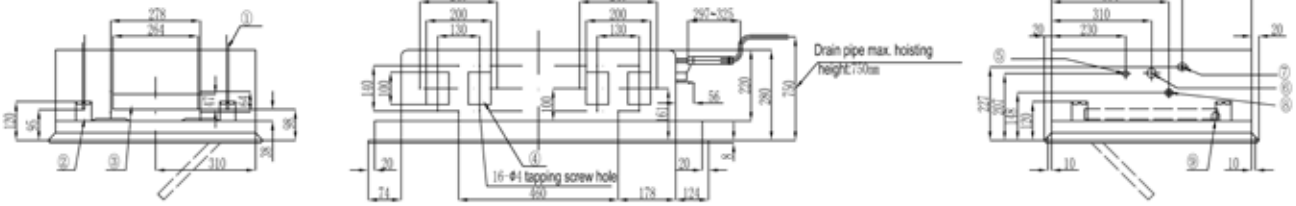


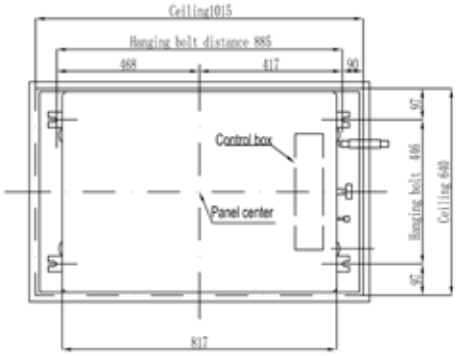
DESCRIPTIONS

N°	NAME
1	Gas pipe
2	Liquid pipe
3	Water filling hole
4	Drain pipe
5	Power supply
6	Communication wire

Indoor units

CVOA - 2-ways cassette





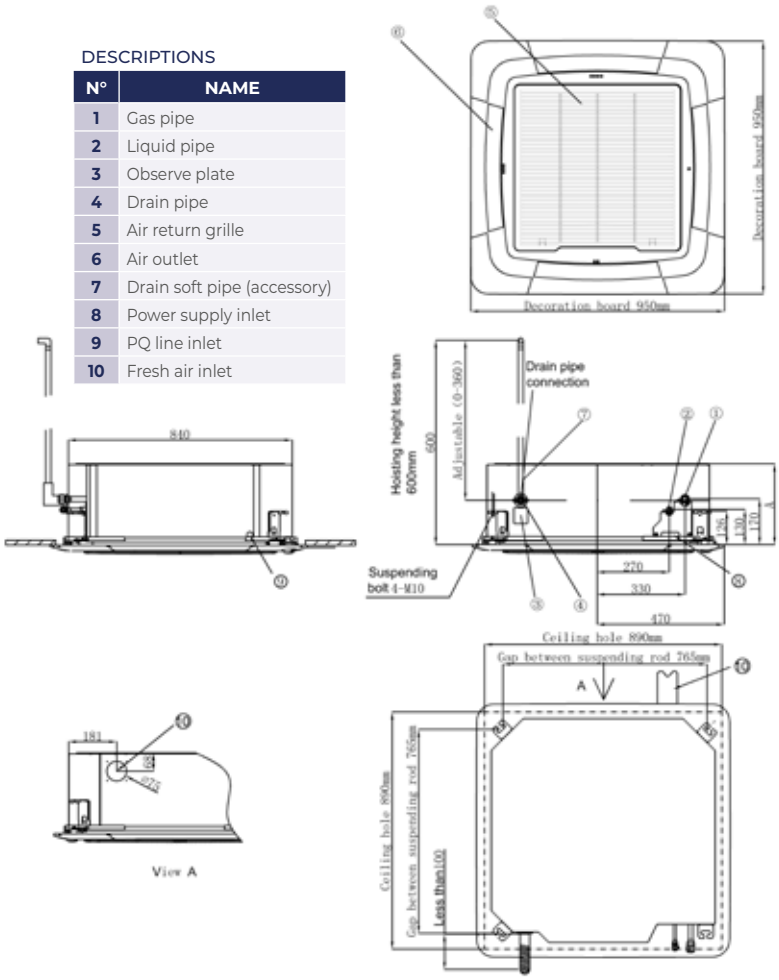
DESCRIPTIONS

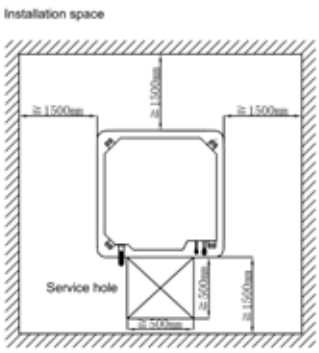
N°	NAME
1	Hanging bolt
2	Pothook
3	Fresh air entrance
4	Exhaust outlet: 4
5	Liquide pipe connect hole
6	Gas pipe connect hole
7	Drain pipe connect hole
8	Natural drain
9	Power line entrance

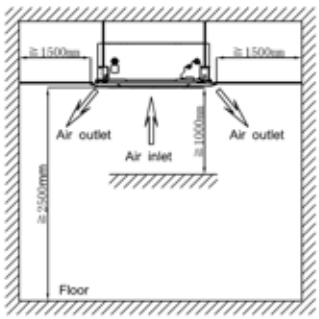
CVTA - 360° cassette

DESCRIPTIONS

N°	NAME
1	Gas pipe
2	Liquid pipe
3	Observe plate
4	Drain pipe
5	Air return grille
6	Air outlet
7	Drain soft pipe (accessory)
8	Power supply inlet
9	PQ line inlet
10	Fresh air inlet







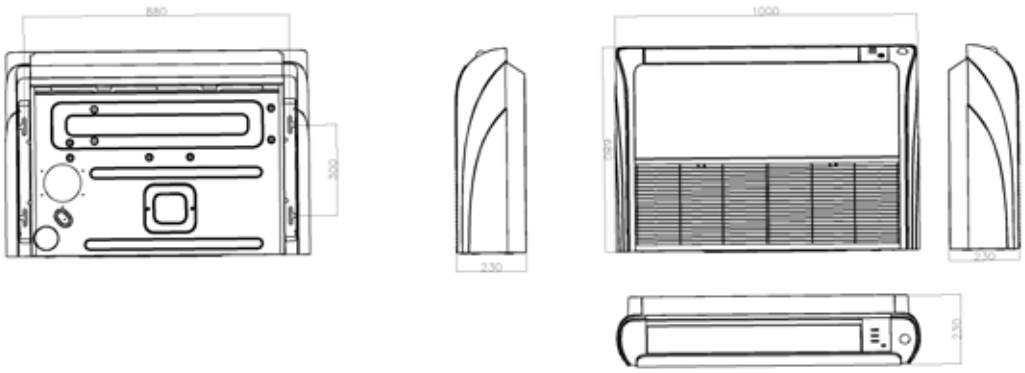
DIMENSIONS (mm)

MODEL	A
022/025/035/045/060	183
070	204

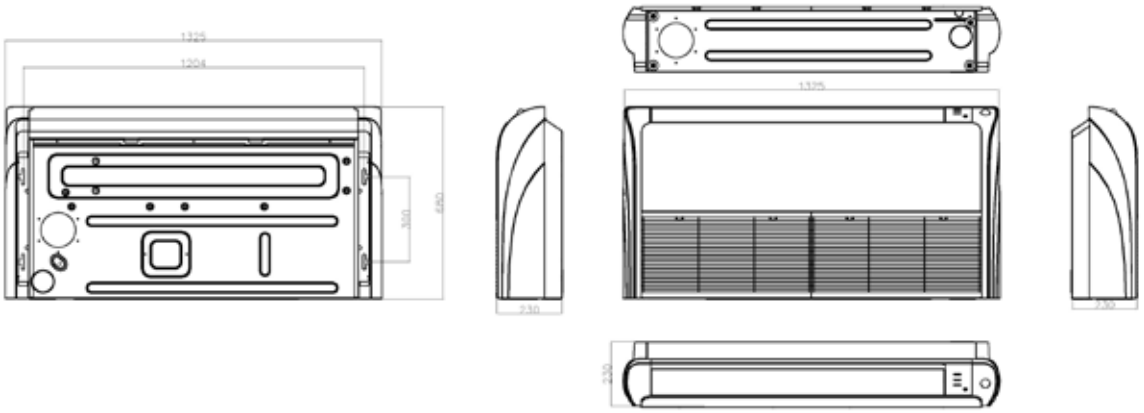
* When the air outlet grille blocked, the min. reserved space is 200 mm.

FVVA - Floor ceiling

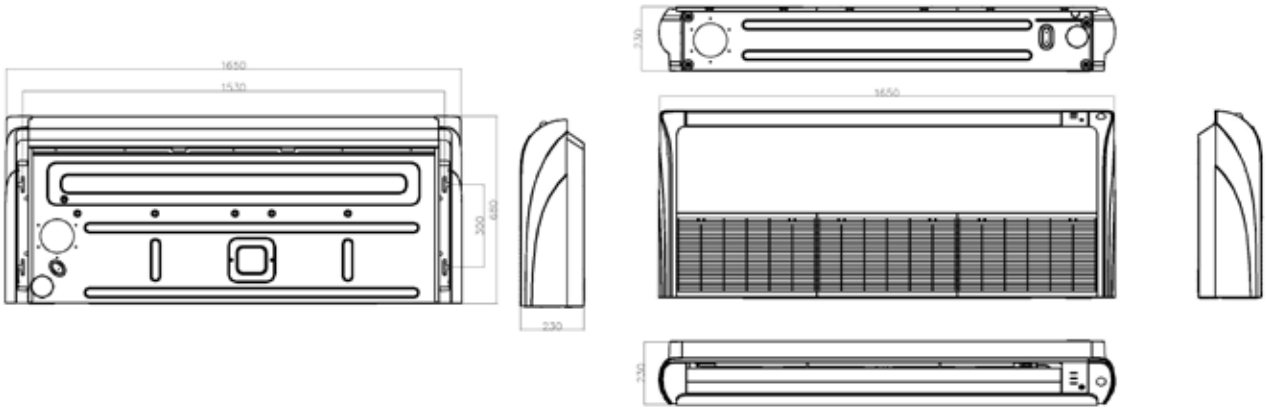
FVVA 025/050



FVVA 70-90

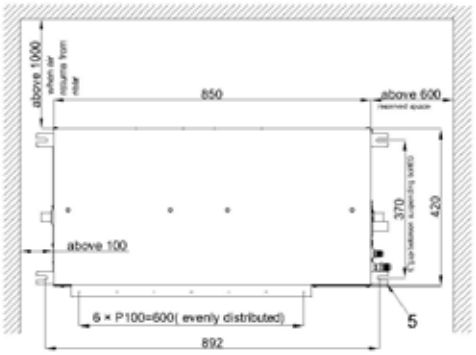


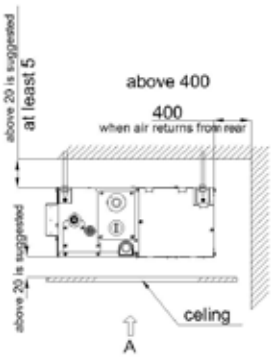
FVVA 110-140



Indoor units

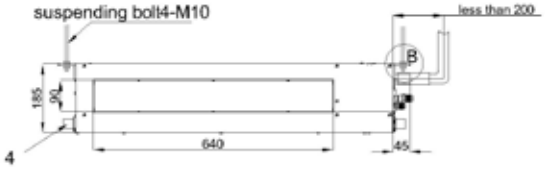
DVLA - Low-pressure ducted

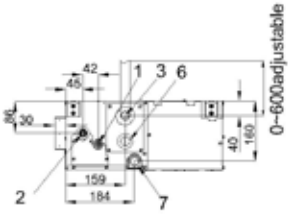


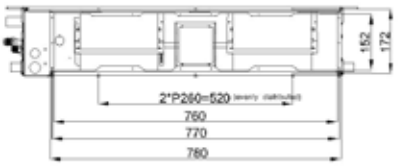


see from A side

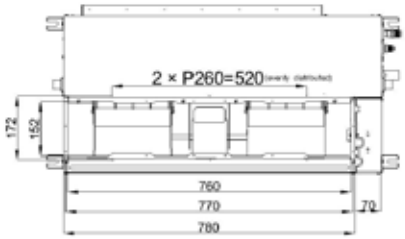
checking hole(hole in celing)







when air returns from rear



when air returns from the bottom

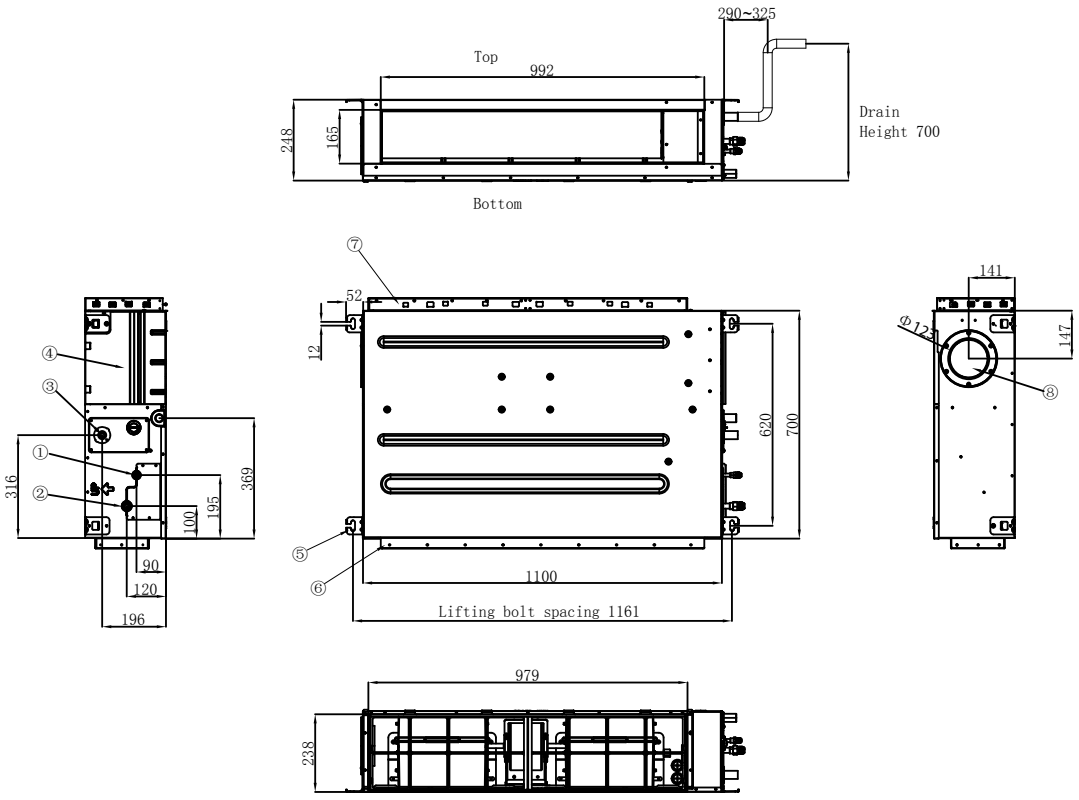
Zoom in section B

DESCRIPTIONS

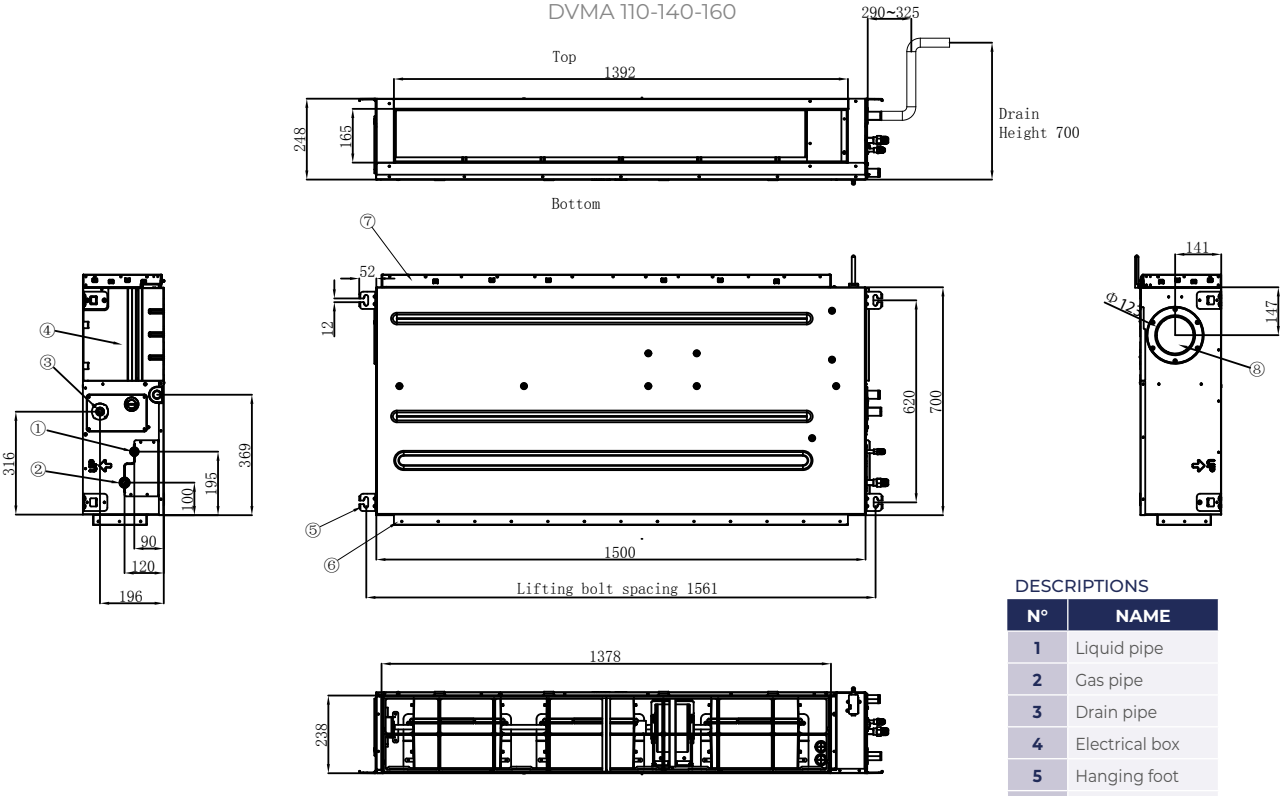
N°	NAME
1	Liquid pipe connection
2	Gas pipe connection
3	Drain hose with pump
4	Drain hose (accessory)
5	Suspending point
6	Checking hole
7	Water drainge outlet

DVMA - Medium-pressure ducted

DVMA 050/070/080-090



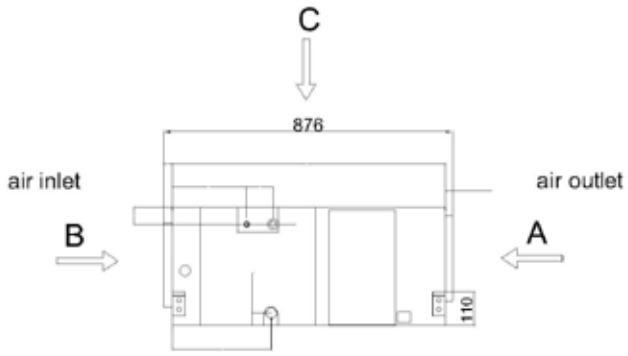
DVMA 110-140-160

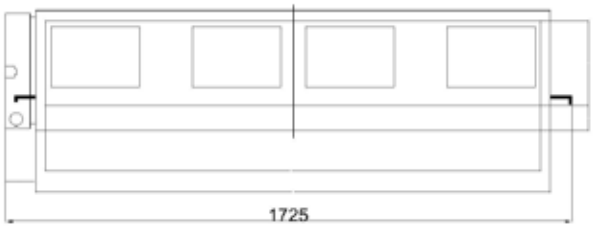


DESCRIPTIONS

N°	NAME
1	Liquid pipe
2	Gas pipe
3	Drain pipe
4	Electrical box
5	Hanging foot
6	Air outlet
7	Air intlet
8	Fresh air

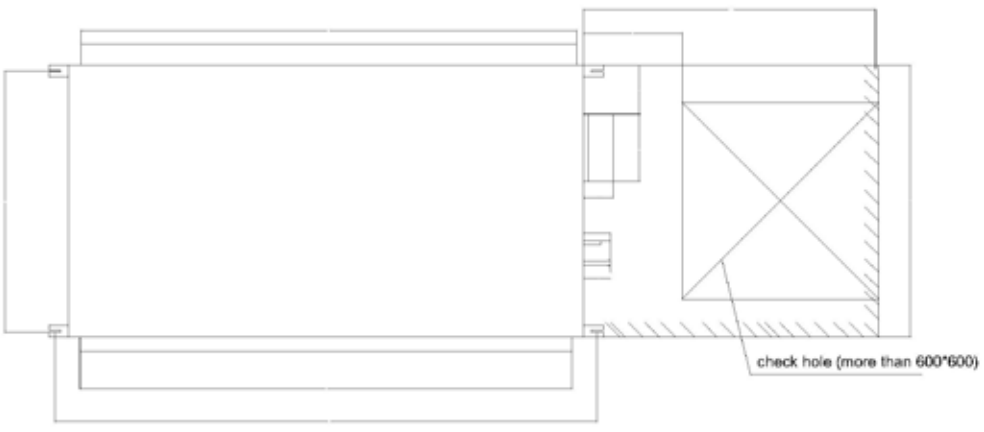
DVHA - High-pressure ducted





view A

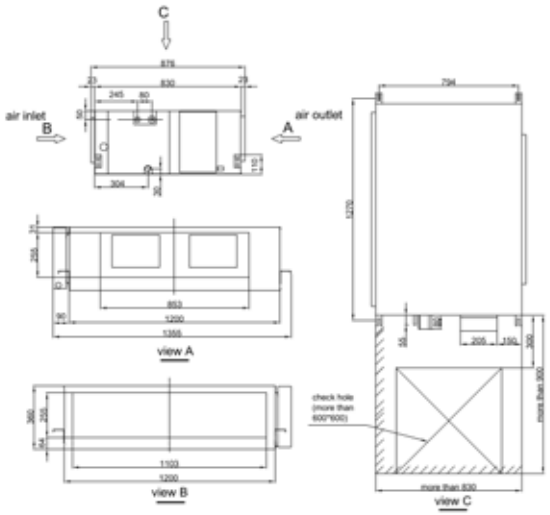
view B



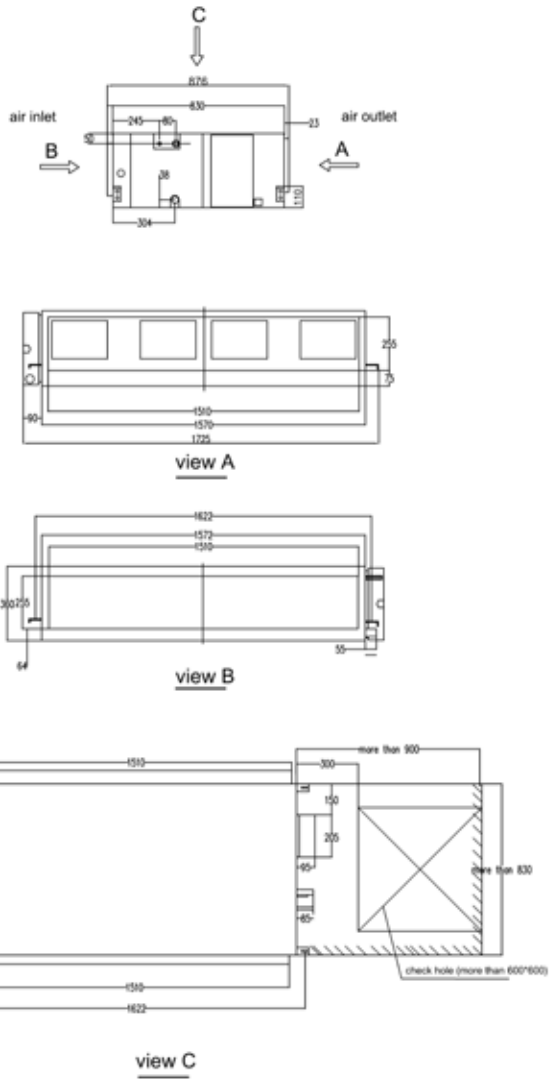
view C

DVFA - Full fresh air unit

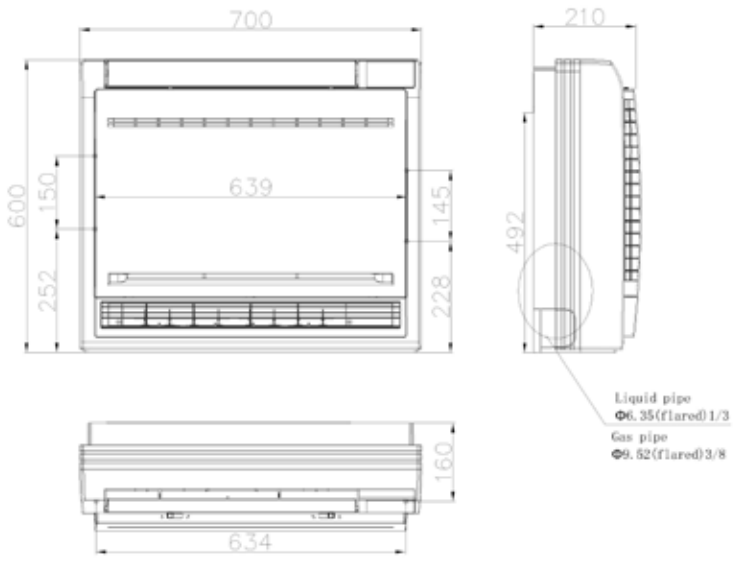
DVFA 140



DVFA 220-280

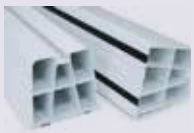


XVVA - Console

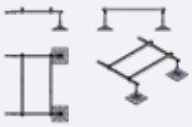


Controller receiver and BMS accessories

ACCESSORY	PHOTO	PART NUMBER	MODEL	FUNCTION	FOR WHAT UNITS?	OPTION/COMMENT
INFRARED CONTROLLER RECEIVER						
INFRARED CONTROLLER RECEIVER		7ACELH009	REC01	• *Realize infrared control.*	• *Ducted*	
BMS SOLUTIONS & MAINTENANCE						
CENTRAL CONTROLLER GATEWAY AND MODBUS/ RTU		7ACELH027	ADV05	• *RWV06 and RWV09 adaptor and ModBus/ RTU gateway.*	• *VVFA*	• *See configuration page 52.*
MAINTENANCE TOOL		7ACELH014	TD02	• *Working parameters monitoring and recording tool.*	• *VVFA* • *VVTA* • *VVEA*	

ACCESSORY	REFERENCE	PICTURE	PART NUMBER	FUNCTION
COPPER				
INSULATED COPPER M1	1/4"-3/8" - 10ml		7ACFH0810	• *Refrigerant tubing to connect outdoor unit with indoor unit (monosplit and multisplit).*
	1/4"-1/2" - 10ml		7ACFH0811	
	3/8"-5/8" - 10ml		7ACFH0812	
	1/4"-3/8" - 7ml		7ACFH0813	
	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		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		7ACTL0507	• *Bracket for outdoor unit installation (monosplit and multisplit).*
4 ANTI-VIBRATION PADS (KIT)			7ACTL0508	• *Ideal for limiting noise and vibrations (good neighborhood).*
FLOOR MOUNT RECYCLED RUBBER (PAIR)	Length 600 mm		7ACTL0509	• *Necessary for a professional installation.* • *High quality: using rubber.*
	Length 1000 mm		7ACTL0510	
FLOOR MOUNT (PAIR)	450x100 mm		7ACTL0513	• *Necessary for a professional installation.* • *Good quality price ratio: using PVC.*

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 FLOWATCH MF2			7ACTL0517	• *Evacuates condensates from indoor units.*
CONDENSATE PUMP FLOWATCHDESIGN			7ACTL0518	• *Evacuates condensates from indoor units.*

Regulations

ON R410A FLUID CONCENTRATION

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 m² > volume = 32.50 m³.
- 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 m³.
- **MAXIMUM LOAD UNDER THE STANDARD:**
  0.44 kg/m³ x 42.5 m³ = 18.7 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^3
1 cubic foot (cu ft)	0.028317 m^3/28.31685 dm^3
1 cubic yard (cu yd)	0.76455 m^3
1 pint	0.568 l
1 gallon-imp	4.546 l
1 gallon (US gal)	3.78541 l or dm^3
1 cubic meter (m^3)	35.31467 cu ft
1 cubic decimeter (dm^3)	0.26428 gal
1 liter (l)	1 dm^3

HP (HORSE POWER) *	BTU	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 dm^3/kg
1 US gallon/pound	8.3 dm^3/kg

DENSITY	
1 pound/cu.ft	0.016 kg/dm^3

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^2	
1 square foot (ft2)	0.0929 m^2	
1 square yard (yd2)	0.8361 m^2	
1 square meter (m^2)	1550 in^2	10.76391 ft^2

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	

° Fahrenheit = °C x 9/5 + 32 / ° Celsius = (°F-32) x 5/9 / ° Celsius = T (Kelvin) - 273.15.
* Indicative values

Rated capacities of our products are given for air conditions as following:
Cooling mode: 35°C out/27°C in (Dry bulb)
Heating mode: +7°C out/20°C in (Dry bulb)

NEW PRODUCT
naming system

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

1 ▸ UNDERSTANDING PRODUCT CODES

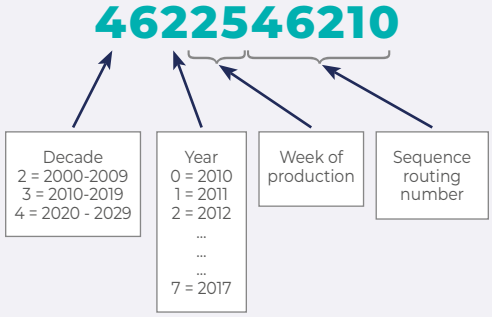
DIGIT N° 1		DIGIT N° 2 & 3 Product constitution		DIGIT N° 4 & 5 subfamily	
2	AirSolar	VF	VRF	01	Floor ceiling
7	Airwell	OG	Chilled water terminal	02	High wall
E	Electra	KT	Kit	03	Ducted
J	Johnson	MB	Monoblock	04	Cassette
		SP	Split (2 units)	05	Window
		CK	Unassembled product	06	Monosplit condensing 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.



GROUPE AIRWELL

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 242,361.30 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 824 596 795 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 one of the clauses of the general terms and conditions of sale at a given moment, this may not be interpreted as a waiver of its rights to invoke such clauses or these general terms and conditions of sale subsequently.

ARTICLE 2 - GENERAL INFORMATION: CATALOGUES, DOCUMENTATION

2.1. Because of the speed of the technological evolution and the evolution of standards or improvements regarding security in the field in question, 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 etchings, photographs, or drawings appear on such documents, at any time and without notice. No document provided by the Vendor is considered a contractual element, and the Vendor cannot be held liable for such documents.

2.2. Where the selection of the proposed equipment is done 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 the collaboration of 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 and 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 authorised.

ARTICLE 3 - ORDERS AND QUOTATIONS

3.1. Orders are firm. Once accepted, the order or quotation may only be modified or cancelled by the buyer with the Vender'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 all other damages.

3.2. Any acceptance of an order or quotation must be written. Sales are final only after the express acceptance materialized by the Vendor's issue of 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 honor 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 balances of orders in progress in the name of the buyer, without any compensation any kind, 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, registrations 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 vendor'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 unsuccessful, for any other cause 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 following the date of such 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-conformity 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 following the delivery. Beyond this period, the received equipment shall be considered conforming to the order. It shall be up to the buyer to provide, with its complaint, any justification as to the reality of the noted defects or anomalies. 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, will result in a discount to be defined according to the condition and/or antiquated or possible obsolescence of the returned product. The buyer shall be responsible for the return transport.

ARTICLE 6 - PRICE - TARIFFS - PRICE REDUCTIONS

6.1. Unless there are provisions or an agreement to the contrary, prices are set in euros net of tax and FCA vendor'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/stuffing fee of 470 euros per container (regardless of container type) will be charged.

6.2. Equipment is sold on the basis of the Vendor's tariffs in force as at the date when each order is placed, or as at the date of issue of each quotation, subject to a 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 dis-

counts on the prices in force, 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 categories of buyers.
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 elimination of the benefit 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 summarised 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., 0.77% in the second 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 unsuccessful, the sale shall be automatically terminated, if so desired by the Vendor, which may bring action 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. In no case 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 rights, for which the buyer shall be fully responsible 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 concerning it, even when such equipment has been handed over to a third party. If the equipment 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 he imports. Airwell cannot be held responsible if the products do not conform to the local standards when they enter the "destination" territory (release for consumption). The buyer must provide in advance all the documents necessary for the conformity of the imported products on the territory of "destination" (release for consumption). Airwell strongly recommends a pre-departure inspection of the goods, at the customer's (buyer's) expense, to ensure the conformity 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 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. The 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 of use at any time by simple letter.

ARTICLE 12 - PROTECTION OF PERSONAL DATA

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 BOLD CHARACTERS 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.

Icon guide

STANDARD

OPTIONAL

TECHNOLOGY

FLEXY MATCH
Indoor units are compatible with monosplit or multisplit installation.

DC INVERTER
Compressor with high efficiency DC engine.

R410A FLUID
RefrigerantR410A.

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

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

PROGRAMMABLE TIMER
Timer set to switch the unit on and off.

AUTO RESTART (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.

AIRWELL, MAIN PARTNER OF STADE FRANÇAIS PARIS

A COMMITTED PARTNERSHIP

Airwell, a French player committed to the energy transition, has chosen Stade Français Rugby for its first sports partnership, to represent their common values, in particular in terms of the ecological and environmental transitions.

AFTER-SALES SERVICE

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TECHNICAL SUPPORT

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