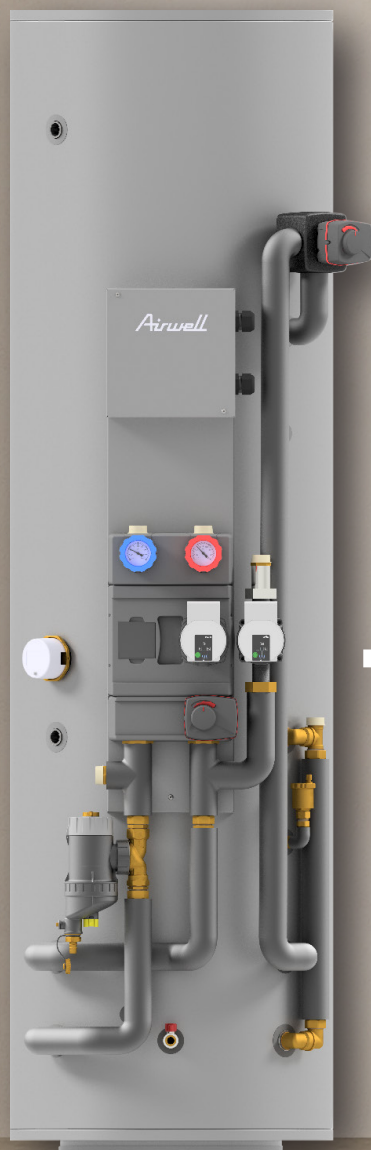


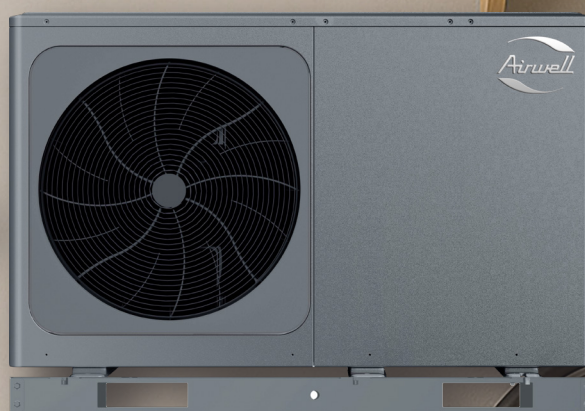
Airwell
Just feel well

HydroDuo & Wellea R290

All-in-1 hydraulic module for heat pump
Buffer + DHW + 1 or 2 zones



+



Much more than a hydraulic module: a complete, ready-to-use solution **designed for installers!**



5-year parts
warranty



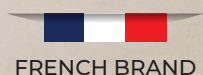
DHW + storage
tank coupling



Assembled in
Brittany (France)



10 hours saved
on site



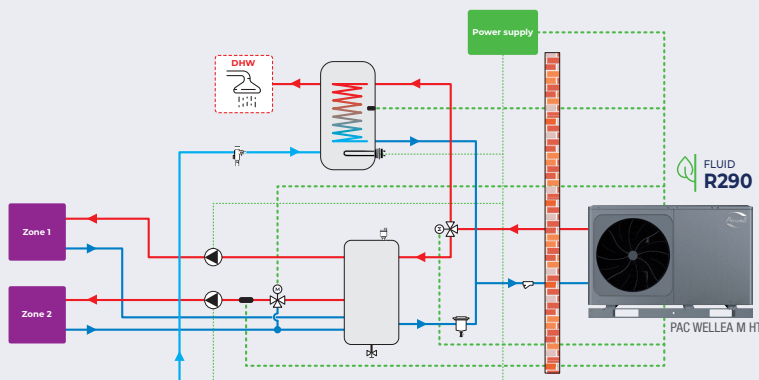
www.airwell.com

Designed and manufactured in France, HydroDuo is much more than a hydraulic module: it's a complete, ready-to-use solution that optimises and simplifies the installation of Wellea air/water heat pumps.

Incorporating all the essential components in a compact, standardised format, HydroDuo guarantees rapid, reliable, high-performance and durable installation, while ensuring optimum comfort for the end user.

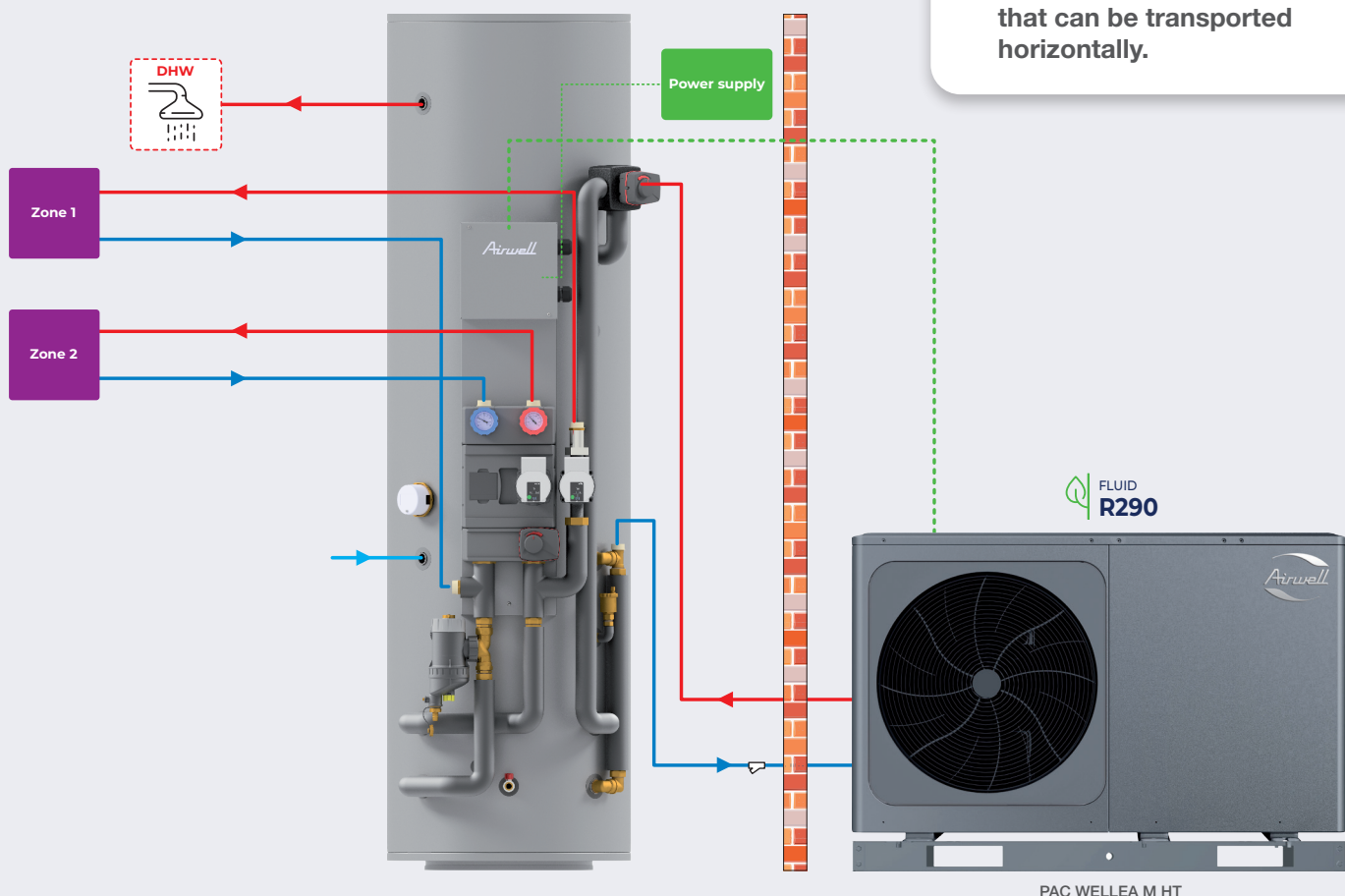
A ready-to-use installation!

BEFORE Conventional DHW + buffer + distribution system



10 hours saved
on site

AFTER HydroDuo installation



- ✓ Only 0.57 m² of floor space for a complete boiler room.
- ✓ 70 cm wide to fit through all the doors.
- ✓ Easy to transport: lightweight stainless steel structure that can be transported horizontally.

Connection diagram
printed on
durable self-
adhesive

**Magnetic
sludge filter:**
quick cleaning
and emptying
without opening
the filter

QUALITY
COMPONENTS



**Stainless
steel tanks:**
robust and
durable over
time

**90L stainless
steel buffer
tank:** large
capacity, suitable
for WELLEA heat
pumps up to
16 kW

Much more efficient than conventional sludge traps!

**Efficient,
durable
installation**

**Specially
designed for
heat pumps**

**Maximised
heat pump
performance**

- ✓ **Genuine dual-action filtration** — particle filter combined with settling volume.
- ✓ **Optimised flow cross-sections** — no pressure drop in the circuit.
- ✓ **Easy access** — filter is accessible without removing the front panel.
- ✓ **Semi-automatic cleaning during operation** — fast and simple, no need to open the filter.
- ✓ **No clogging, no flow reduction** large sediment volume and wide filtration surface ensure consistent performance.



CALEFFI
Hydronic Solutions

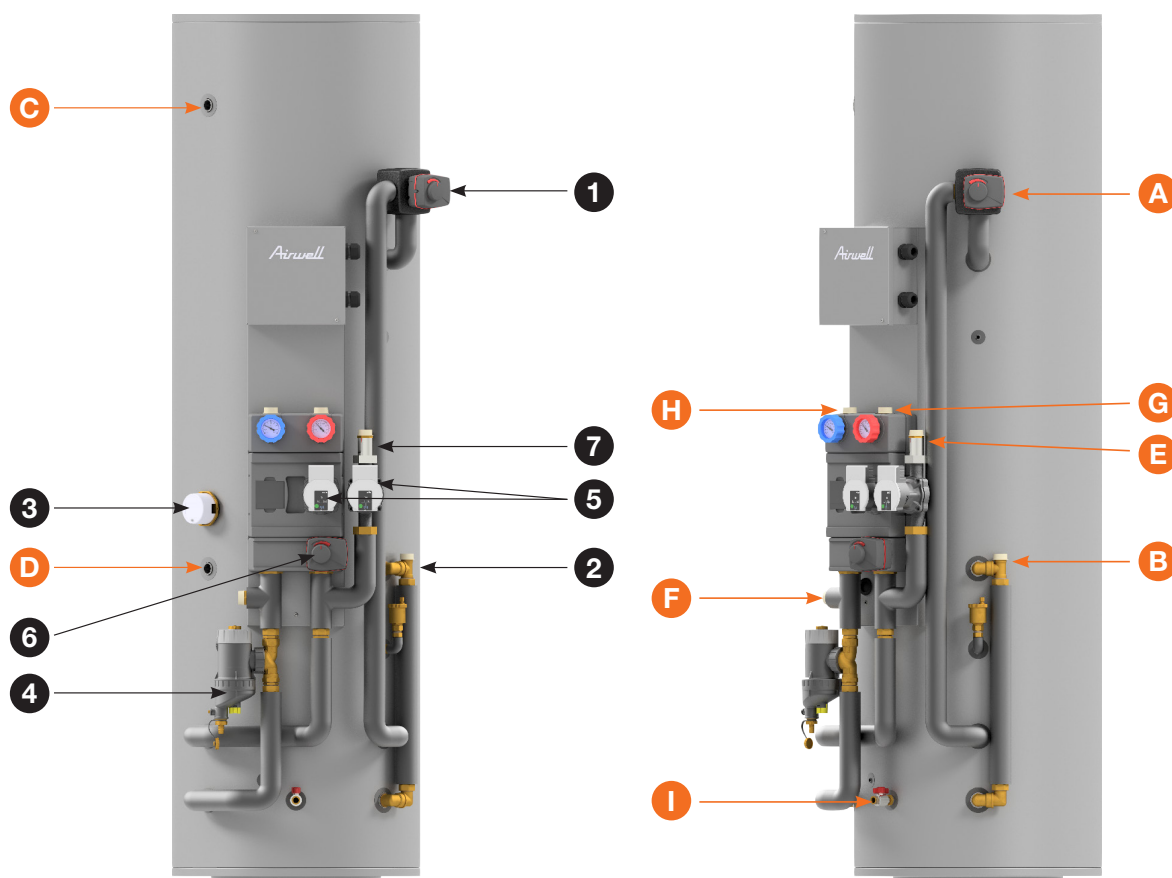
French innovation to save time and improve performance



Assembled in
Brittany (France)

- ✓ **Fully compatible with Airwell heat pumps** — supports R290 and R32, monobloc or split systems (up to 16 kW).
- ✓ **Built-in DHW back-up** — domestic hot water guaranteed, even in backup mode.
- ✓ **Cooling-ready** — insulation suitable for reversible underfloor heating and fan coil units.
- ✓ **100% Plug & Play** — all options are factory-integrated for rapid commissioning.
- ✓ **Simplified procurement** — everything needed for installation is included.
- ✓ **Standardised setup** — one universal system for all installation types.

100% PRE-ASSEMBLED ACCESSORIES AND DISTRIBUTION



LEGENDS

Components:

- 1** V3-way DHW valve
- 2** Automatic air vent
- 3** DHW back-up heater
- 4** Magnetic sludge trap
- 5** Zone 1 and 2 heating circulators
- 6** Zone 2 mixing valve
- 7** Zone 1 non-return valve

Hydraulic network:

- A** Heat pump flow
- B** Heat pump return
- C** DHW flow
- D** DHW inlet
- E** Direct zone flow (zone 1)
- F** Direct zone return (zone 1)
- G** Mixed zone flow (zone 2)
- H** Mixed zone return (zone 2)
- I** Buffer tank drain valve

The best compact, simple and fast solution for a stress-free installation!



Reliability & Performance

- ✓ **No wiring errors** — factory pre-wired components with terminal blocks matching the heat pump.
- ✓ **Factory pre-tested system** — 100% watertight and fully functional before shipment.
- ✓ **Optimised flow rates** — DN 26 pipes precisely sized for manufacturer's specifications.
- ✓ **Minimized heat loss** — pre-insulated pipes and insulated tanks for efficiency.
- ✓ **Neat and tidy installation** — clean design with no exposed or scattered pipes.



DHW + storage tank coupling




5-year parts warranty*

* Subject to declaration of commissioning.




Modular installation



HYDRODUO ESSENTIEL

- ✓ Electric heater
- ✓ 3-way/DHW/Heating valve
- ✓ DHW/Heating valve motor


E



HYDRODUO 1 ZONE

- ✓ Electric heater
- ✓ 3-way/DHW/Heating valve
- ✓ DHW/Heating valve motor
- ✓ Circulator zone 1
- ✓ Temperature sensors (DHW)

1



HYDRODUO 2 ZONES

- ✓ Electric heater
- ✓ 3-way/DHW/Heating valve
- ✓ 3-way valve zone 2
- ✓ DHW/Heating valve motor
- ✓ Circulator zone 1
- ✓ Circulator zone 2
- ✓ Temperature sensors (DHW & zone 2)
- ✓ Valve motor, zone 2

2

Install faster and offer excellence with HydroDuo!

Reduces installation time

Minimises the risk of errors



Optimises the profitability of installations

Advantages of the Wellea Monobloc HT R290 heat pump



Environmentally-friendly natural refrigerant R290 (GWP 3)

The Wellea Monobloc HT uses the natural refrigerant R290, which has the lowest environmental impact on the market (200 times lower than R32). This new generation of heat pump helps to reduce carbon emissions while delivering very high energy efficiency.



Design and silence

The outdoor unit has a discreet, elegant design, takes up very little space and is very quiet. Thanks to the soundproofing and anti-vibration plate on the compressor, noise pollution is greatly reduced.



Easy to install

Installing a Wellea Monobloc heat pump is quick and requires very little installation work. It's the ideal solution for those who want comfort quickly, without major installation.

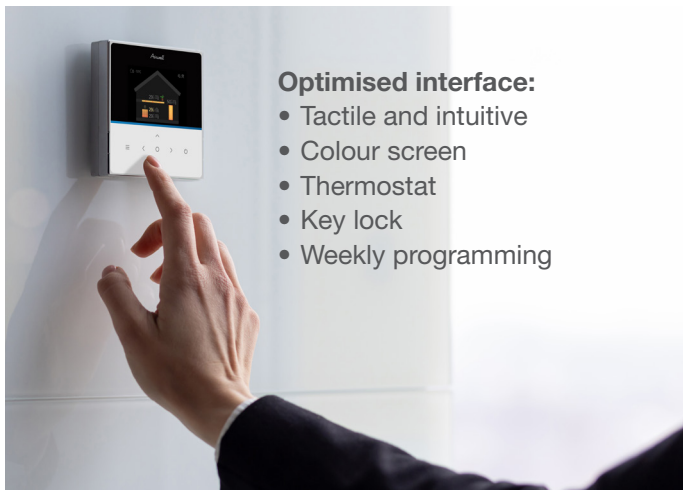


Remote control

Thanks to the remote control's built-in WiFi and the AirHome smartphone application, you can control your heat pump remotely.



A new remote control for absolute comfort at your fingertips!



Optimised interface:

- Tactile and intuitive
- Colour screen
- Thermostat
- Key lock
- Weekly programming



Compatible with photovoltaic panels thanks to SG ready

This feature transforms the free energy from your photovoltaic panels into thermal energy (hot water). So you save energy and reduce your electricity bill!



Performance and savings

- High-temperature single-package heat pump up to 75°C (without power maintenance).
- Ideal for renovation, it offers optimum performance with operation down to -25°C.



Green Fin treatment

The new anti-corrosion treatment on the exchanger of the outdoor unit offers increased resistance to salty air: resists 3 times longer than the BlueFin treatment.



Component protection

- Application of silicone grease to the fan motor to protect the windings from the vagaries of the weather.
- The electronic board is treated with a varnish to protect against humidity.
- The expansion vessel inside the heat pump and the copper/steel weld are protected by an epoxy resin.
- The screws are made of stainless steel.
- The copper tube welds are protected by acrylic resin.

WELLEA MONOBLOC HT R290 TECHNICAL DATA

OUTDOOR UNIT	BDHW-040R-04M25	BDHW-060R-04M25	BDHW-080R-04M25	BDHW-100R-04M25	BDHW-120R-04M25	BDHW-140R-04M25	BDHW-160R-04M25	BDHW-120R-04T35	BDHW-140R-04T35	BDHW-160R-04T35
Part number	7MB140020	7MB140021	7MB140022	7MB140023	7MB140024	7MB140025	7MB140026	7MB140027	7MB140028	7MB140029
Phase	Single-phase				Single-phase			Three-phase		

HEATING MODE

Air +7°C Water 35°C	Heating capacity	kW	4.50	6.20	8.40	10.00	12.00	14.00	15.00	12.00	14.00	15.00
	Power input	kW	0.87	1.27	1.68	2.13	2.50	3.11	3.41	2.50	3.11	3.41
	COP		5.15	4.90	5.00	4.70	4.80	4.50	4.40	4.80	4.50	4.40
Air -7°C Water 35°C	Heating capacity	kW	4.50	5.90	7.00	8.00	10.00	11.50	12.70	10.00	11.50	12.70
	Power input	kW	1.45	2.00	2.33	2.81	3.57	4.26	5.08	3.57	4.26	5.08
	COP		3.10	2.95	3.00	2.85	2.80	2.70	2.50	2.80	2.70	2.50
Air +7°C Water 55°C	Heating capacity	kW	4.40	6.00	7.50	9.50	11.90	13.80	16.00	11.90	13.80	16.00
	Power input	kW	1.49	2.03	2.36	3.06	3.90	4.68	5.61	3.90	4.68	5.61
	COP		2.95	2.95	3.18	3.10	3.05	2.95	2.85	3.05	2.95	2.85
Air -7°C Water 55°C	Heating capacity	kW	4.00	5.15	6.15	6.85	9.80	11.00	12.50	9.80	11.00	12.50
	Power input	kW	2.05	2.58	3.00	3.43	4.78	5.37	6.25	4.78	5.37	6.25
	COP		1.95	2.00	2.05	2.00	2.05	2.05	2.00	2.05	2.05	2.00
Air +7°C Water 60°C	Heating capacity	kW	4.58	6.20	8.31	9.27	12.06	14.00	15.10	12.06	14.00	15.10
	Power input	kW	1.56	2.20	2.79	3.28	4.18	5.05	5.64	4.18	5.05	5.64
	COP		2.94	2.82	2.98	2.82	2.88	2.77	2.68	2.88	2.77	2.68
Air +7°C Water 65°C	Heating capacity	kW	4.63	6.19	8.11	9.26	12.02	13.71	14.71	12.02	13.71	14.71
	Power input	kW	1.80	2.51	3.03	3.64	4.58	5.47	6.06	4.58	5.47	6.06
	COP		2.57	2.47	2.67	2.55	2.63	2.51	2.43	2.63	2.51	2.43
Air +7°C Water 75°C	Heating capacity	kW	4.65	5.84	8.04	8.85	10.89	11.40	12.36	10.89	11.40	12.36
	Power input	kW	2.22	3.00	3.73	4.32	5.41	5.79	6.43	5.41	5.79	6.43
	COP		2.10	1.95	2.15	2.05	2.01	1.97	1.92	2.01	1.97	1.92

COOLING MODE

Air +35°C Water 18°C	Cooling capacity	kW	4.50	6.50	8.30	10.00	12.00	14.00	16.00	12.00	14.00	16.00
	EER		5.50	5.10	5.15	4.75	4.50	4.20	3.90	4.50	4.20	3.90
Air +35°C Water 7°C	Cooling capacity	kW	4.70	6.80	7.50	8.90	11.50	12.70	14.00	11.50	12.70	14.00
	EER		3.65	3.10	3.45	3.25	3.05	2.90	2.75	3.05	2.90	2.75

PERFORMANCE

Energy label (average climate)	Water outlet to 35°C		A+++				A+++					
	Water outlet to 55°C		A++				A++					
Seasonal efficiency (average climate)	Water outlet to 35°C	%	199	192	204	199	183	182	180	183	182	180
	Water outlet to 55°C	%	148	149	149	149	141	141	139	141	141	139
SCOP (average climate)	Water outlet to 35°C		5.07	4.89	5.19	5.07	4.67	4.63	4.59	4.67	4.63	4.59
	Water outlet to 55°C		3.79	3.82	3.82	3.82	3.62	3.61	3.57	3.62	3.61	3.57
Sound level		dB(A)	56	58	60	61	65	65	69	65	65	69
Sound pressure level (1m)		dB(A)	44	46	48	49	51	52	56	51	52	56
Silent mode sound power level		dB(A)	-	-	-	-	-	-	-	58	59	60
Silent mode sound pressure level (1m)		dB(A)	-	-	-	-	-	-	-	43	44	48

OPERATING LIMITS

Outdoor air temperature	Cooling	°C	-5/46				-5/46					
	Heating	°C	-25/35				-25/35					
	Domestic hot water	°C	-25/46				-25/46					

POWER SUPPLY

Phase/Voltage/Frequentie		1P/220-240V/50Hz				1P/220-240V/50Hz			3P/380-415V/50Hz		
Power cable section	mm²	3G2.5	3G2.5	3G4	3G4	3G6	3G6	3G6	5G2.5	5G2.5	5G2.5
Fuse rating am	A	16	16	20	20	32	32	32	16	16	16
Electric backup heater built-in	kW	3				3			3/6/9		
Power cable section electric backup heater	mm²	3G2.5	3G2.5	3G2.5	3G2.5	3G2.5	3G2.5	3G2.5	5G2.5	5G2.5	5G2.5
Fuse rating am electric backup heater	A	16	16	16	16	16	16	16	16	16	16
Remote controller connection (shielded)	mm²	2x0.75	2x0.75	2x0.75	2x0.75	2x0.75	2x0.75	2x0.75	2x0.75	2x0.75	2x0.75

INSTALLATION AND OTHERS

Airflow	m³/h	2770	4030	4060	4650	4060	4650
Refrigerant/GWP		R290/3					
Charge	kg	0.7	1.1	1.25			
Outline dimensions (WxHxD)	mm	1295x792x429	1385x945x526	1385x945x526			
Package dimensions (WxHxD)	mm	1375x965x475	1465x1120x560	1465x1120x560			
Net weight/Gross weight	kg	98/121	121/148	144/170		160/188	
Pipe diameter (water)	inches	R1"	R1"1/4	R1"1/4			

HYDRODUO WELLEA R290 TECHNICAL DATA

DESIGNATION		ODHA-200T-08M22-00	ODHA-200T-08M22-01	ODHA-200T-08M22-02	ODHA-300T-08M22-00	ODHA-300T-08M22-01	ODHA-300T-08M22-02
Part number		7SPI30005	7SPI30006	7SPI30007	7SPI30008	7SPI30009	7SPI30010

CONFIGURATION

Heat pump max. power	kW	16			16		
Function	1 direct zone	-	✓	✓	-	✓	✓
	1 mixed zone	-	-	✓	-	-	✓

DHW TANK

Volume	L	200	300
Exchanger surface area	m²	2.5	3.1
Material		Stainless steel (444)	
Maximum operating pressure	bar	7	

BUFFER TANK

Volume	L	90					
MatériauMaterial		Stainless steel (444)					
Maximum operating pressure	bar	7					

PERFORMANCE

Static losses	W	90			98		
Energy class		C			C		

CIRCULATORS

Reference		-	Wilo PARA 25-180/8-75		-	Wilo PARA	
Maximum static pressure	kPa	-	80		-	80	
Maximum power input	W	-	75		-	75	

DIMENSIONS

Height	mm	1700			2150		
Diameter	mm	620			620		
Depth	mm	700	815		700	815	
Package dimensions (WxHxD)	mm	1200x1840x800			2250x1000x1100		
Net weight/Gross weight	kg	100/110	105/115	115/125	120/130	125/135	135/145

POWER SUPPLY

Control panel power supply		-	Type E plug	Type E plug	-	Type E plug	Type E plug
DHW backup heater power	kW	3	3	3	3	3	3
DHW heater power supply		Type E plug	Type E plug	Type E plug	Type E plug	Type E plug	Type E plug
DHW backup electrical protection	A	16	16	16	16	16	16
Tank/Heat Pump connection	mm²	1 cable 3x0.75	1 cable 3x0.75 1 cable 2x0.75	2 cables 3x0.75 2 cables 2x0.75	1 cable 3x0.75	1 cable 3x0.75 1 cable 2x0.75	2 cables 3x0.75 2 cables 2x0.75

INSTALLATION

Heat pump connection	Departure	inche	1" M	1" M	1" M	1" M	1" M	1" M
	Return	inche	1" M	1" M	1" M	1" M	1" M	1" M
DHW connection	Hot water outlet	inche	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F
	Cold water inlet	inche	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F
Zone 1 connection	Departure	inche	-	1" M	1" M	-	1" M	1" M
	Return	inche	-	1" M	1" M	-	1" M	1" M
Zone 2 connection	Departure	inche	-	-	1" M	-	-	1" M
	Return	inche	-	-	1" M	-	-	1" M

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A benchmark French brand for professionals.

French expert and creator of climatic and thermal solutions for over 75 years.

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