

PAC + / PAC + R

3 models from 8 to 14 kW



PAC + / PAC + R

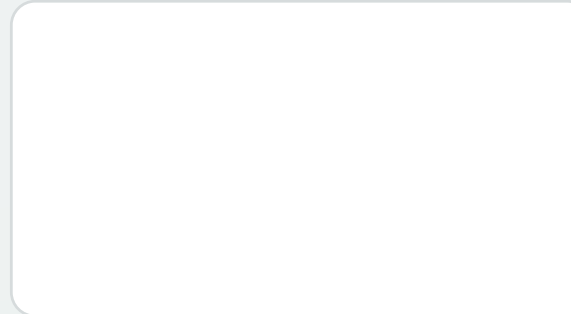
		PAC + / PAC + R 08	PAC + / PAC + R 10	PAC + / PAC + R 12		
Water system at 30/35°C						
Heating	Capacity at outside temp. of 7°C	kW	8.1	11.2	14.1	
	Power input	kW	2.3	3.1	3.9	
	COP		3.53	3.6	3.63	
	Capacity at outside temp. of 2°C*	kW	6.2	8.1	10.0	
	Power input at outside temp. of 2°C	kW	2.3	3.0	3.6	
	Capacity at outside temp. of -7°C*	kW	5.1	7.2	8.7	
	Power input at outside temp. of -7°C	kW	2.3	3.1	3.7	
	Nominal water flow	m ³ /h	1.43	1.97	2.52	
	Available hydraulic pressure (HS)	kPa	48	33	51	
	Outdoor temperature operating limits	°C	-15°C			
Min./max. water leaving temperature	°C	25°C / 55°C				
Cooling	Capacity at air temp 35°C, water temp 18/23°C (PAC + only)	kW	7.2	8.9	9.8	
	Power input	kW	2.5	3.7	4.5	
	EER		2.84	2.42	2.21	
	Outdoor temperature operating limits	°C	20°C / 45°C			
	Min./max. water leaving temperature	°C	7°C / 18°C			
Water system at 40/45°C						
Heating	Capacity at outside temp. of 7°C	kW	7.7	10.7	13.6	
	Power input	kW	2.8	3.8	4.6	
	Heating capacity at outside temp. of -7°C*	kW	5.1	6.9	9.1	
	Power input at outside temp. of -7°C	kW	2.8	3.7	4.5	
	Nominal water flow	m ³ /h	1.36	1.90	2.43	
	Available hydraulic pressure (HS)	kPa	50	38	55	
	Outdoor temperature operating limits	°C	-15°C			
	Min./max. water leaving temperature	°C	25°C / 55°C			
	Cooling	Capacity at air temp 35°C, water temp 7/12°C - PAC + only	kW	5.6	7.7	7.1
		Power input	kW	2.5	3.6	4.2
Sound pressure level at 5m in open space**		dB(A)	39	39	39	
Sound power level**		dB(A)	64	64	64	
Compressor type			Scroll			
Pipe line	Weight	kg	180	183	188	
	Dimensions (WxDxH)	mm	1150x401x1309			
	Electrical heater capacity (PAC + only)	kW	6 (2+4)			
	Heat exchanger		Coaxial			
	Water inlet	inches	1" female			
Water outlet	inches	1" female				
Expansion tank (PAC + only)	litres	5	5	5		
Power supply 1-230V	Power cable (PAC + /PAC + R)	mm ²	3x10 / 3x2.5	3x16 / 3x4	3x16 / 3x6	
	Main fuse (PAC + /PAC + R)	A	63 / 20	63 / 25	63 / 32	
Power supply 3N-400V	Power cable (PAC + /PAC + R)	mm ²	-	5x4 / 5x2.5	5x4 / 5x2.5	
	Main fuse (PAC + /PAC + R)	A	-	25 / 16	32 / 16	

* Value includes defrosting.

** Sound level of units equipped with sound insulation on compressor (supplied as standard). Add 3 dB(A) is this insulation if removed.



Your official dealer



Airwell Group
 1bis, Avenue du 8 mai 1945
 Saint Quentin en Yvelines
 78284 GUYANCOURT
 France
 Tel. +33 (0)1 39 44 78 00
 Fax +33 (0)1 39 44 65 17
 www.airwell.com

THE + PRODUCTS

- "Ready to use" monobloc, all parameters set at the factory.
- Softstarter device for single-phase models.
- Phase controller for three-phase models.
- Low susceptibility to clogging with coaxial heat exchanger.
- Optimised accessibility to components eases installation and maintenance.
- Outdoor ambient temperature controled, to ensure comfort and optimum COP.
- Operates at outside temperatures of up to -15°C.
- Water leaving temperature up to 55°C
- Low noise levels
- Compatible with heated flooring, radiators and water terminal units.

2 VERSIONS TO SUIT ALL YOUR NEEDS

PAC + :

This heat pump provides for heating needs only

- Designed to power heated flooring, radiators or water terminal units
- Reversible: Heater mode and cooling mode
- Built-in 6 kW electrical supply point
- Safety power-off switch
- Built-in 5 l expansion tank
- Supplied with room thermostat

PAC + R:

This heat pump releases your boiler

- Designed to fit with your existing heating installation, and to releave your boiler if necessary
- Heating mode only
- Optional control management kit with programmable room thermostat
- Optional hydraulic connection kit with 3-way valves

STANDARD EQUIPMENT

- Scroll compressor
- Smooth hydrophilic fin heat exchanger
- Ventilators with protruding blades
- Heat exchange protection grille
- Coaxial heat exchanger
- Electric and control panel
- Phase controller for three-phase models
- softstarter device on single-phase models
- Cycle inversion valve
- 3-speed water circulation pump
- Safety selector
- Automatic purging
- Safety valve
- Water filler valve
- High-/Low pressure pressostats

PAC + only:

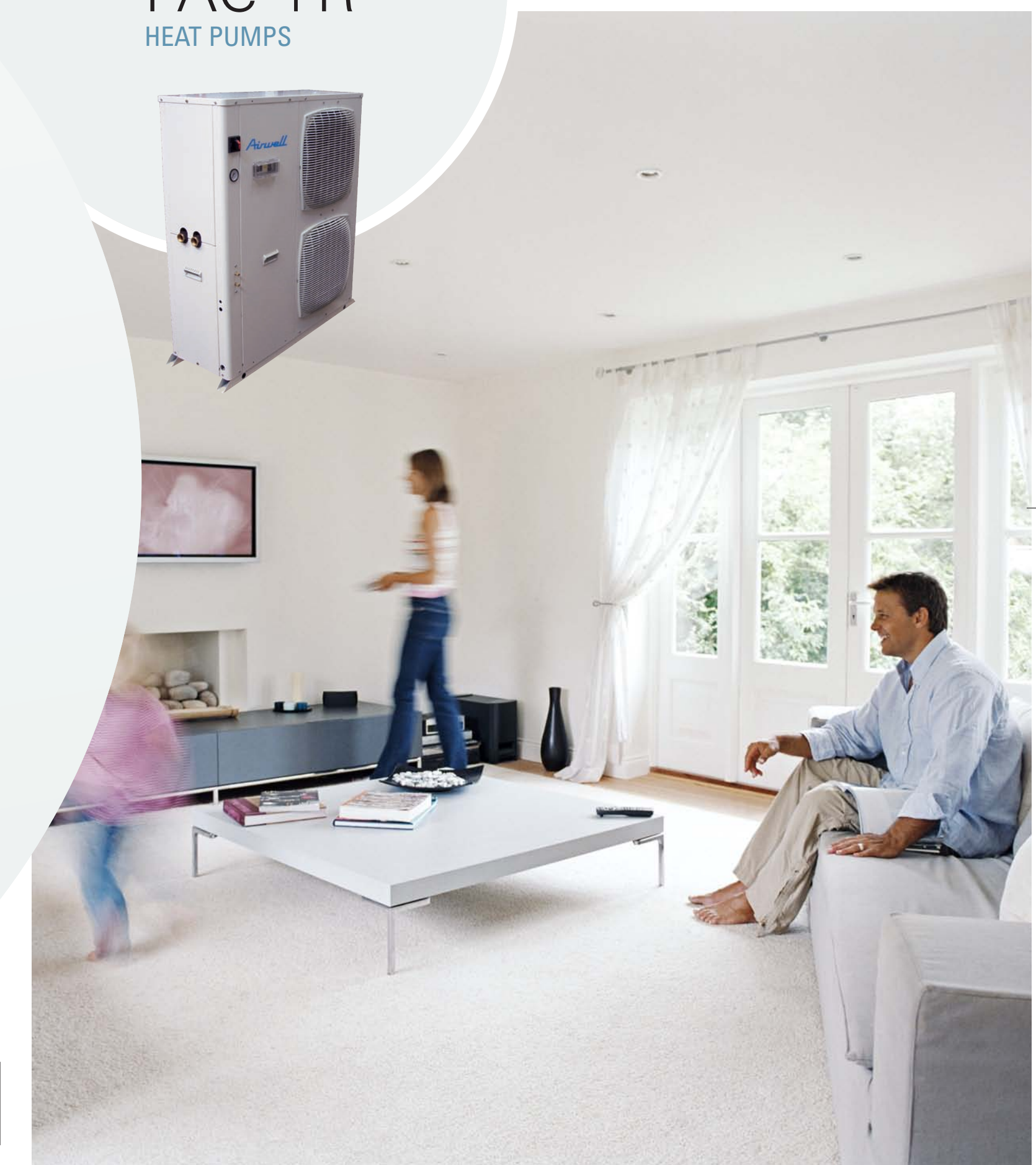
- 5-litre expansion tank
- 6 kW electrical heater
- Room thermostat



PAC + PAC +R HEAT PUMPS



[CM PAC+ 1 - A 1 GB] - These specifications are intended as a guideline and are subject to change without notice - photos are non-contractual - Printed in EU.



**PAC +
PAC + R**

**AIR/WATER HEAT
PUMPS**

3 models from 8.1 to 14.1 kW

Certification

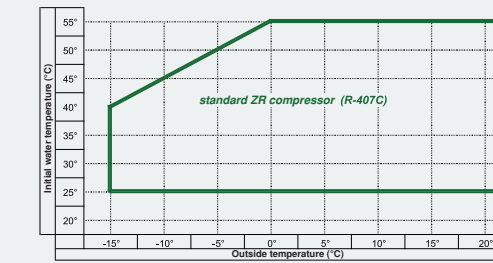


Pompe à Chaleur
en cours,
sous réserve d'obtention



A TRUE HEAT PUMP OPTIMISED TO RECOVER HEAT FROM THE AIR

Exceptionally good COP and high water temperatures with the green refrigerant R-407C



Low susceptibility to clogging and optimised performance with coaxial heat exchanger acting against the current in heating mode

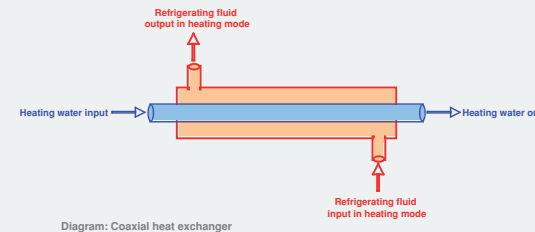
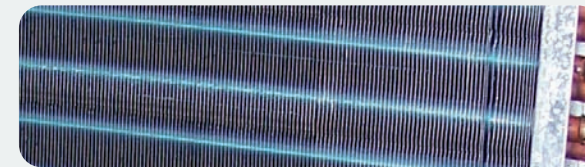


Diagram: Coaxial heat exchanger

A SMOOTH-FIN EVAPORATOR AT A RATE OF 1.8 mm TO EASE THE FLOW OF CONDENSATION AND DEFROSTING WATER

A large exchanging surface for maximum performance at low temperatures



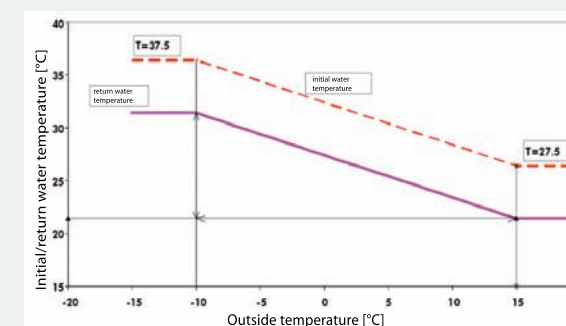
SIMPLE ELECTROMAGNETIC EQUIPMENT (NO ELECTRIC DIAGRAM) WITH GLOBALLY RECOGNISED CONTROLLER



The controller interface lets you view or modify the different parameters

COMPRESSOR USE UNDER OUTDOOR AMBIENT TEMPERATURE CONTROL

By using an outdoor ambient temperature controlled system, it ensures optimum use of the heat pump with an exceptionally high annual COP.



TECHNOLOGY EXPERIENCE FOR OVER 10 YEARS

- PAC + and PAC + R are a new generation of heat pumps based on technology which has been produced and tested for 10 years.

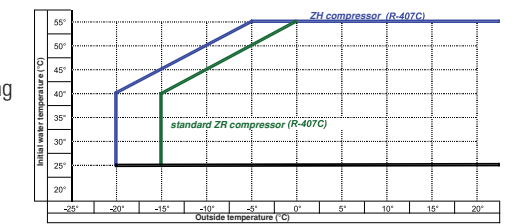
A HEAT PUMP PRODUCED ENTIRELY IN FRANCE

- French manufacturer AIRWELL has been producing heat pumps for 30 years
- Our PAC + / PAC + R heat pump range is designed and produced at our factory in Tilières sur Avre (80 km west of Paris)



OPTIONS

- High performance compressor ZH*: Water leaving temperature at 55°C with outdoor temperature from -5°C down to -20°C (sizes 8 and 10: single or three-phase - size 12: three-phase)
- Exchanger with copper fins / copper



Scroll compressor ZH

PAC + R OPTIONS

- Regulation kit with programmable air thermostat

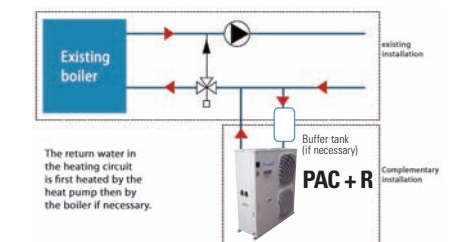


Programmable room thermostat



Regulation kit

- Optional hydraulic connection kit with 3-way valve



The return water in the heating circuit is first heated by the heat pump then by the boiler if necessary.

QUESTIONS AND ANSWERS

What happens in very low temperatures?

The heat pump preheats the return fluid water and the additional heater (electrical on PAC +, the boiler on PAC + R) supplies all the heat necessary.

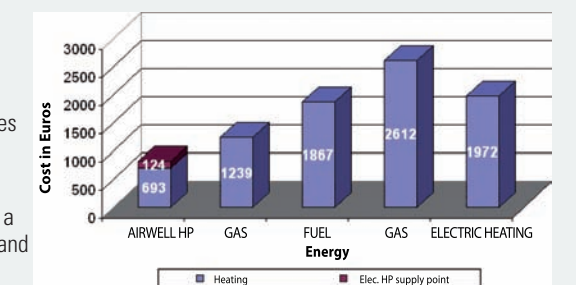
Is it necessary to install a buffer tank?

Yes, if the installation is equipped with thermostatic valves. In this case, a 150-200 litre tank will avoid short-circuits.

What savings can I expect to make?

For every 1 kWh of electricity consumed, Airwell heat pumps provides more than 3 kWh (yearly average) of heat, resulting in considerable energy savings.

Example: The PAC + 08 will cover practically all the requirements of a 130 m² detached house built in the 1980's, even if poorly insulated, and the electrical supply point will hardly be used.



* PAC + / PAC + R equipped with the ZH compressor are not NF HP certified, but are eligible to a tax credit.