

Airwell

Just feel well

2019
HEATING



Airwell

AIR CONDITIONING & HEATING

Airwell makes life easier
with dedicated services

Professionnals



INTERNET WEBSITE

Order easier online

■ www.airwell-pro.com



TECHNICAL DOCUMENTATION

Find here all the documentation you need

■ <http://lh.airwell-res.com/>



PROJECTS SERVICE

tel ■ [+33 \(0\)1 76 21 82 60](tel:+330176218260)



TRAININGS



■ www.airwell-academy.fr

e-mail ■ airwell-academy@airwell-res.com



AFTER-SALES SERVICES

tel ■ [+33 \(0\)1 76 21 82 95](tel:+330176218295)

From Monday to Friday, from 8 am to 12:30 pm and from 2 to 5pm

■ **Parts orders:** sales@adhoc-pro.com

■ **Technical support:** technical-spfr@airwell-res.com

Consumers



INTERNET WEBSITE

■ www.airwell-res.com



SELECTION ASSISTANT

■ **3D designer:**

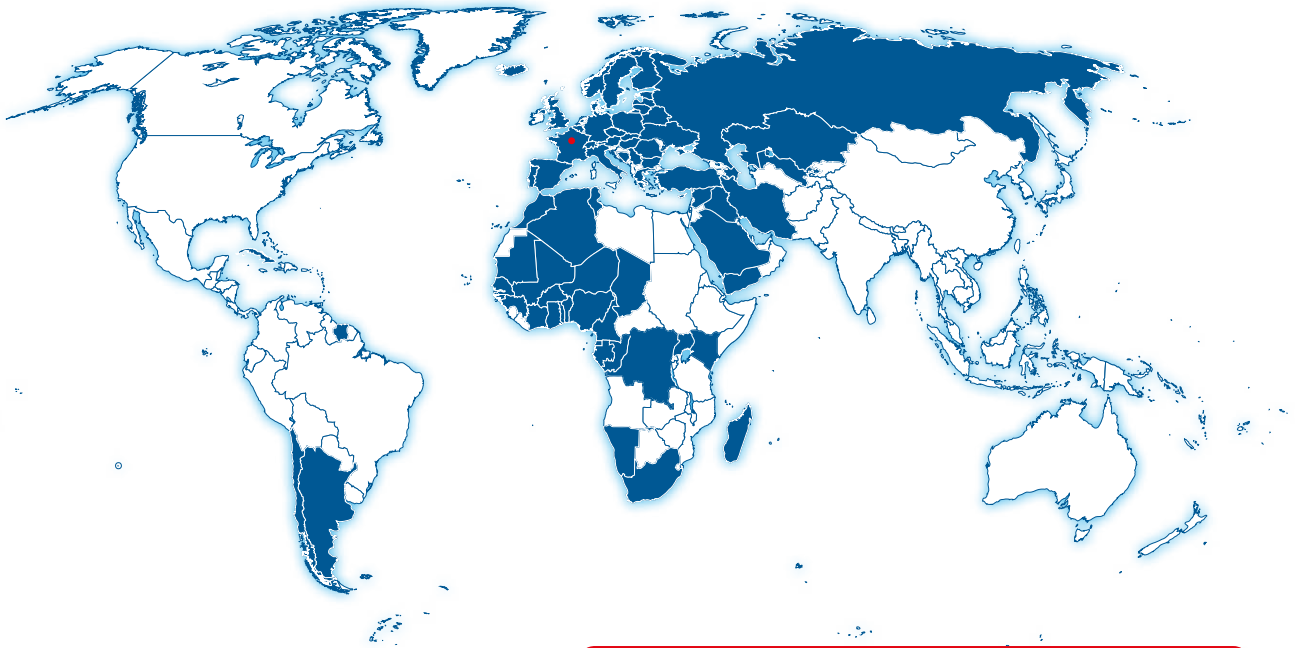
Simulate in 3D your air conditioning from home

■ **White paper**

The expertise of a french brand



An international sales network



Find our partners on www.airwell-pro.fr

HEADQUARTERS

3, avenue du Centre
Les Quadrants - Bâtiment A
78280 Guyancourt - FRANCE

GENERAL CONTACT

tel ■ **+33 (0)1 76 21 82 00**
e-mail ■ **contact@airwell-res.com**

OUR PARTNERS



OUR PARTNERS



Table of contents



| | PAGE |
|---|------|
| HISTORY | 6 |
| SERVICES DIVISION | 12 |
| AIR TO WATER HEAT PUMPS RANGE | 14 |
| PAC BT Monobloc Low temperature heat pump | 18 |
| PAC BT Split Low temperature heat pump split | 22 |
| PAC BTE Split Low temperature heat pump split three services (Cooling, Heating, DHW) | 22 |
| PAC Home Indoor monobloc heat pump | 24 |
| PAC Home+ Indoor monobloc heat pump with DHW production | 26 |
| DOMESTIC HOT WATER PRODUCTION RANGE | 32 |
| TDF Ducted thermodynamic water heaters | 32 |
| TDF Solar Solar thermodynamic water heaters | 32 |
| AIRFLOW & AIR TO AIR HEAT PUMP RANGES | 34 |
| Airflow 2020 Thermodynamic CMV dual flow | 36 |
| DLSE+VAV Ducted medium static pressure monosplit | 38 |
| TOOL BOX | 45 |
| ICONS GUIDE | 52 |



HISTORY



Your french expert for more than 70 years



1947 Start of the Airwell history



1950 Mass production of the first window unit

1970 Development of « Split » units

1982 Airwell, first maker in Europe to produce high wall units

2013 Launch of Zero Default objective

2014 Inauguration of training centers



2015 Start of the Renewable Energy Project

2017 70 years and in the era of 3.0, Airwell is BIM ready



2018 Development in Middle East and Latin America



Airwell

your expert...

TRADE

Airwell makes every effort to make life easier for its customers.

From the selection of the solution to the maintenance, through training, Airwell accompanies you in all stages of your air conditioning and heating project.

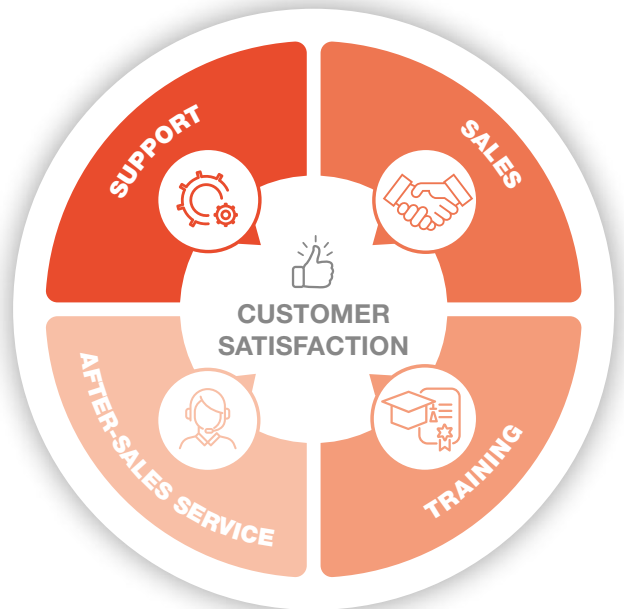


CERTIFICATIONS

Airwell is recognized for its reliability, certified **ISO 9001: 2015**, at the level of marketing, after-sales service and training.



ISO 9001: 2015 is a standard that establishes the requirements for a quality management system. It guarantees high efficiency and overall satisfaction of our customers.



PRE-SALES

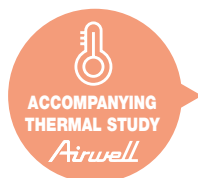
Airwell is at your disposal to assist you in the realization of your projects (residential, hotels, businesses, industrial...).

Upstream, the Pre-Sales department studies your projects, recommending the best technical solutions.

With the help of the selection software, the Pre-Sales team assists you in the design of residential and light commercial air conditioning systems.



**CUSTOMER
NEED**



**ACCOMPANYING
THERMAL STUDY**
Airwell



**PRODUCT
SELECTION**
Airwell



QUOTATION
Airwell



**CUSTOMER
SATISFACTION**

F-GAS

FGAS

CERTIFICATION

The F-Gas regulation (EU 517/2014) came into effect on the 1st of January 2015.

Refrigerants are man-made gases that can stay in the atmosphere for centuries and contribute to the overall greenhouse effect. There are three types: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF6).

The F-Gas regulation, initiated by the European Commission, aims to reduce the greenhouse effect in the EU from 80 to 95% (compared to 1990 levels) in the field of air conditioning.

EQUIPMENT DISTRIBUTOR

Keeping a register including nature and the type of equipment sold

The purchaser is a distributor or operator

- ✓ Name
- ✓ SIRET or SIREN
- ✓ Certificate number of capacity issued equivalent in U.E.

The purchaser is neither distributor nor operator

- ✓ Name
- ✓ SIRET (if applicable)
- ✓ Name of the operator with from which he has contracted to assembly and commissioning equipment (SIRET No. of this one + Certificate number capacity or certificate equivalent issued in U.E.)

- ✓ Copy of the contract retained by the equipment distributor during at least 5 years (since the date acquisition of equipment).



AIRWELL ACADEMY

PRODUCT TRAINING

JOB TRAINING

SKILLS TRAINING

For more details on trainings:
www.airwell-academy.fr

Airwell

your expert...

CUSTOMERS

The French expert has an international network of partners (distributors, installers,...).

Together, you build a lasting relationship: pre-sales advice, product availability, technical sales support...

Partnership is an integral part of Airwell's DNA.

TECHNICAL SUPPORT

LOCAL AND REMOTE TECHNICAL SUPPORT

- Specialized technicians
- Direct contact by phone and on site if necessary for VIP customers
- Training on all products
- Commissioning by a Technical Station Approved by Airwell (TSA)

CALL CENTER

- Quick and effective answers delivered by our experts.
- High availability.
- A multilingual center.
- Professionals trained continuously.
- A customer and service approach first!
- Listening and assistance until the complete customer satisfaction.



+33 (0)1 76 21 82 95

DEDICATED TOOLS

INTERNET WEBSITE

Online order:

Airwell offers its referenced customers to order their products online via the WEBSITE www.airwell-pro.com

Documentation Library:

<http://lh.airwell-res.com>



BIM

Airwell is BIM Ready!

In partnership with **Stabiplan**, Airwell announces its launch in **BIM** (Building Information Modeling) and offers its tertiary and commercial air conditioning (VRF) range in BIM format broadcast on the **MEPcontent** library.


This allows REVIT® users to integrate Airwell content for all their building projects, made in the 3D digital world.

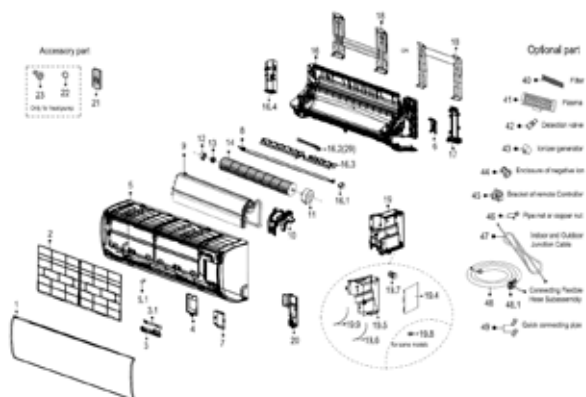
Airwell Academy offers dedicated BIM training, including an introduction to the features of REVIT®, as well as drawings of heating / cooling networks.



SPARE PARTS

FOR PRODUCTS UNDER AIWELL SUPPORT

 sales@adhoc-pro.com



Airwell

your expert...

PRODUCTS

With a failure rate of less than 0.04%, Airwell is committed to providing reliable products.

Thanks to a wide range of products, Airwell brings you particularly flexible, efficient and competitive answers, adapted to the specific characteristics of your markets.

CERTIFICATIONS

Airwell participates in the Eurovent certification program.

Eurovent Certification certifies the performance of its air conditioning products (splits and multisplits with at least 2 indoor units), in accordance with European and international standards. This common platform for all manufacturers improves the integrity and accuracy of the industry's performance.



See Airwell products certified Eurovent on the site:

www.eurovent-certification.com



The performance of Airwell products meets EN-14825 (seasonal energy standard). Airwell's production sites are ISO 9001 and ISO 14001 certified and by most recognized certification bodies.



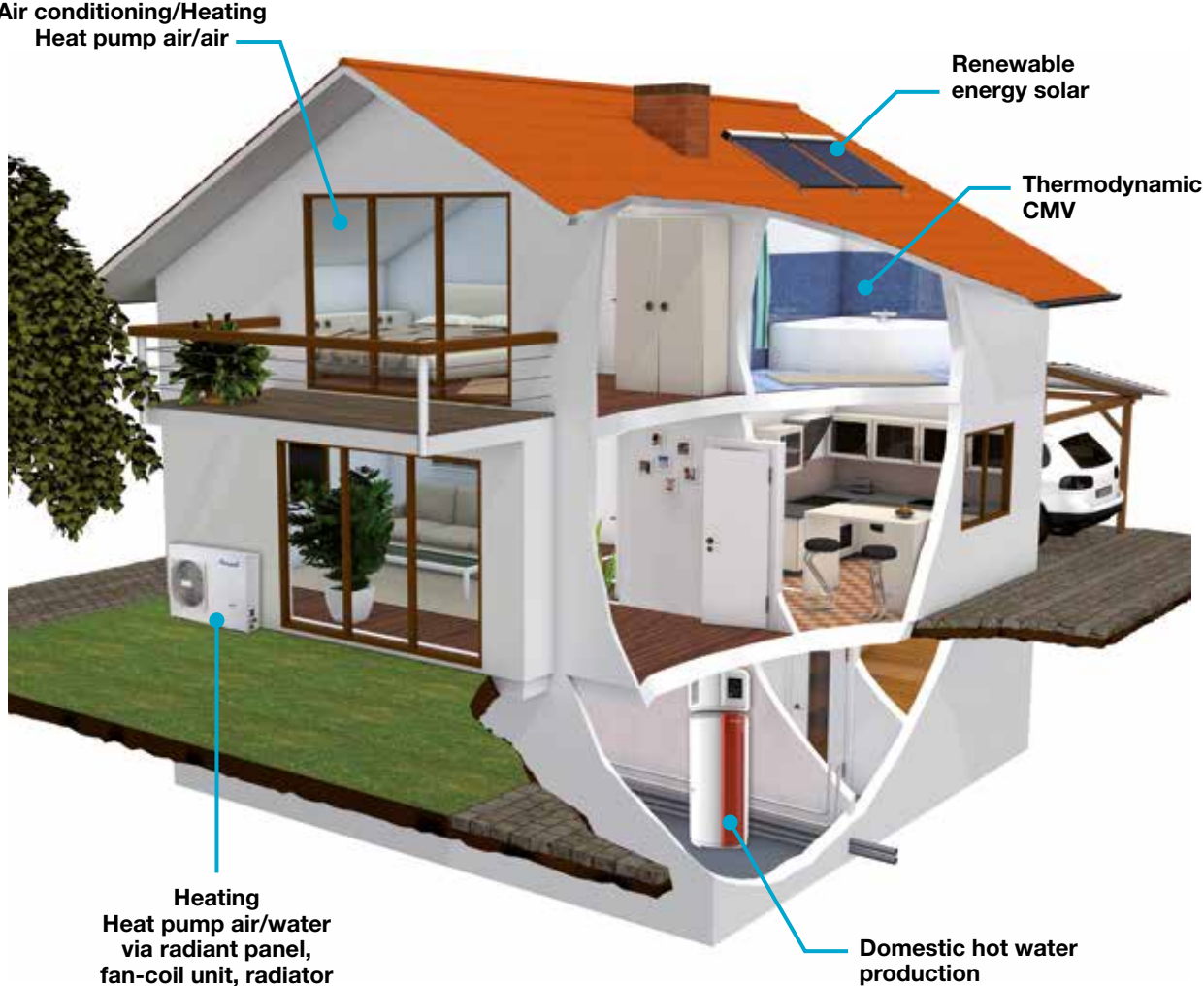
Airwell is committed to providing reliable and efficient solutions. Certified NF Electricity Performance, Airwell products guarantee high energy performance and sound power.

The NF Electricity Performance offers a guarantee of quality and safety to all products certified by this label.

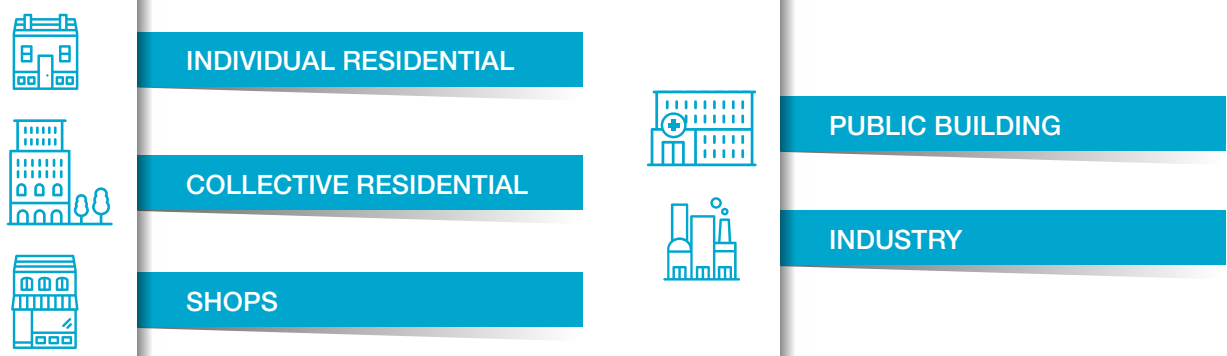
Volunteer in terms of environmental protection and thus offering cost-effective solar solutions, Airwell has obtained the Keymark certification attesting to the compliance with European standards in the range of monobloc low-temperature heat pumps.

These certifications are complementary and ensure a quality product that meets French and European standards.

Airwell, necessarily a solution for your needs








RANGE





Air to water heat pumps range

| | MODEL NAME | Page | Main application | Mode | Domestic Hot Water | + Product |
|--------------------------------|--|------|----------------------------|---------------------|--------------------|---------------------------------------|
| |  PAC BT MONOBLOC | 18 | Refurbishment | Cooling and Heating | Optional | Monobloc system |
| LOW TEMPERATURE HEAT PUMP |  PAC BT SPLIT | 22 | New build | Cooling and Heating | Optional | Compact solution |
| |  PAC BTE SPLIT THREE SERVICES | 22 | New build | Cooling and Heating | Integrated | Solar energy available |
| HEAT PUMP WITHOUT OUTDOOR UNIT |  PAC HOME | 24 | Invisible: no outdoor unit | Cooling and Heating | Optional | Double compressor, invisible solution |
| |  PAC HOME+ | 26 | Invisible: no outdoor unit | Cooling and Heating | Integrated | All in one: DHW and reversible |

- **Optimum comfort** all year long
- **Energy Savings**
- **Eco-responsible solution** (solar energy)



Heat pumps range



Why installing a heat pump?

It's choosing the most cost-effective and environmentally friendly heating system on the market.

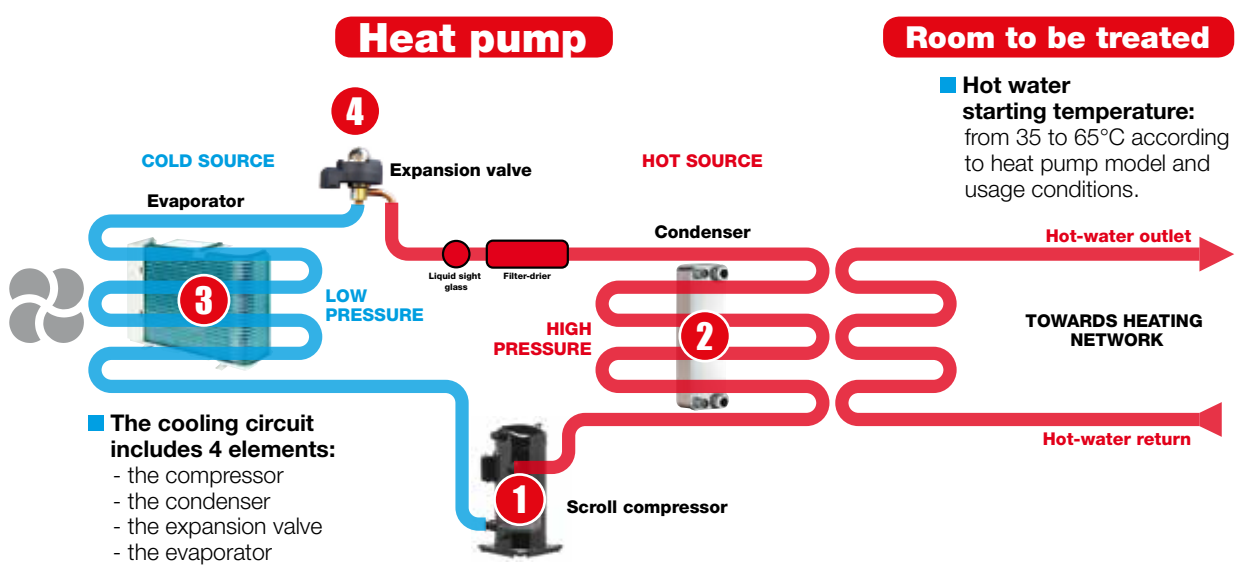


The advantages of a heat pump at home:

- Clean and renewable energy
- Up to **60% savings** on the annual heating bill
- Comfort all year round: **reversible** solution
- Compatibility with different types of transmitters (floor heating, radiator...)
- **Economic:** benefit from financial aids (see tool box).

STANDARD REFRIGERANT CIRCUIT

A heat pump recovers heat outside the house, concentrates this heat and restores it inside the house.



- 1** The compressor compresses the refrigerant and raises its pressure and temperature.
- 2** By passing through the condenser, the heated refrigerant yields some of its calories to the warmer environment with lower temperature.
- 3** The regulator lowers the pressure and thus the fluid temperature.
- 4** By going through the evaporator, its temperature being lower than that of the cold environment, the fluid captures the calories and the cycle can start again.

PAC BT LOW TEMPERATURE MONOBLOC HEAT PUMP



COP up to 4.72

EER up to 4.55



+ PRODUCTS

- Cooling and heating mode.
- No refrigerant handling.
- Energy efficiency: 178,3% (ηs).



(included)

FEATURES



DC INVERTER



R410A FLUID



WEEK TIMER



COOLING MODE OPERATIONAL UP TO 46°C OUTDOORS



HEATING MODE OPERATIONAL DOWN TO -20°C OUTDOORS



HIGH TEMPERATURE UP TO 60°C



FLOOR HEATING



HIGH-TEMPERATURE RADIATOR



LOW-TEMPERATURE RADIATOR



BOILER BACKUP



ULTRA QUIET



WATER PROGRAMS



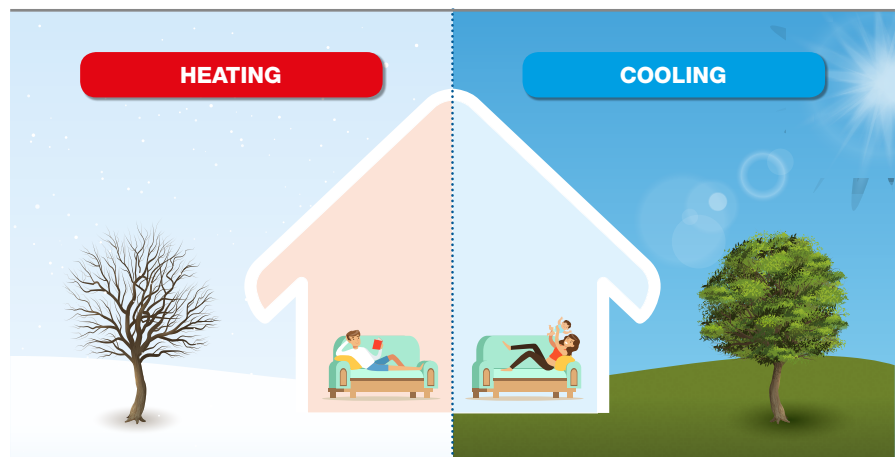
DOMESTIC HOT WATER



PAC BT 5-7-9 kW

PAC BT 10-12-14-16 kW

- Compatible with several transmitters: heated floors, radiators, fan-convectors...
- “Plug & Play” solution to replace old monobloc heat pumps.
- Compact solution: small footprint.
- Safety features included (safety valve, expansion tank).
- High performance: COP up to 4.72 and EER up to 4.55.
- Auxiliary heat resistance included (depends on model - not included on sizes 5, 7 and 9).
- Large control screen integrated on the product (status, diagnosis...).
- Durability: high protection treatment on electronic cards.



PAC BT MONOBLOC TECHNICAL DATA - SINGLE PHASE

| Models | | | AWHW-PAC-BT-MB-5KW-H11 | AWHW-PAC-BT-MB-7KW-H11 | AWHW-PAC-BT-MB-9KW-H11 | AWHW-PAC-BT-MB-10KW-H11 | AWHW-PAC-BT-MB-12KW-H11 | AWHW-PAC-BT-MB-14KW-H11 | AWHW-PAC-BT-MB-16KW-H11 | |
|---|----------------------|----------|------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--|
| Code 1~230V-50Hz | | | 7HP061015 | 7HP061016 | 7HP061017 | 7HP061018 | 7HP061019 | 7HP061020 | 7HP061021 | |
| Phases | | | Single phase | Single phase | Single phase | Single phase | Single phase | Single phase | Single phase | |
| HEATING MODE | | | | | | | | | | |
| Air+7°C Water 30/35°C | Heating capacity | kW | 4.58 | 6.55 | 8.64 | 10.43 | 12.17 | 14.76 | 16.33 | |
| | Power input | kW | 0.97 | 1.45 | 2.01 | 2.28 | 2.73 | 3.40 | 3.90 | |
| | COP | | 4.72 | 4.52 | 4.30 | 4.57 | 4.46 | 4.34 | 4.19 | |
| Air+7°C Water 40/45°C | Heating capacity | kW | 4.67 | 6.69 | 9.19 | 10.17 | 12.58 | 14.08 | 16.12 | |
| | Power input | kW | 1.43 | 2.05 | 2.63 | 3.08 | 3.86 | 4.47 | 5.22 | |
| | COP | | 3.27 | 3.26 | 3.49 | 3.30 | 3.26 | 3.15 | 3.09 | |
| Air+7°C Water 47/55°C | Heating capacity | kW | 4.76 | 6.24 | 9.35 | 8.89 | 10.55 | 11.64 | 13.43 | |
| | Power input | kW | 1.88 | 2.39 | 3.28 | 3.38 | 3.84 | 4.38 | 5.22 | |
| | COP | | 2.53 | 2.61 | 2.85 | 2.63 | 2.75 | 2.66 | 2.57 | |
| Air-7°C Water 30/35°C | Heating capacity | kW | 3.80 | 5.00 | 6.20 | 7.90 | 9.50 | 11.10 | 12.30 | |
| | Power input | kW | 1.40 | 2.00 | 2.60 | 3.20 | 3.80 | 4.40 | 5.00 | |
| | COP | | 2.63 | 2.49 | 2.39 | 2.50 | 2.50 | 2.54 | 2.46 | |
| COOLING MODE | | | | | | | | | | |
| Air 35°C Water indoor 12°C / outdoor +7°C | Cooling capacity | kW | 4.55 | 6.71 | 8.06 | 10.44 | 12.21 | 12.95 | 13.72 | |
| | Power input | kW | 1.55 | 2.57 | 3.51 | 3.28 | 4.17 | 4.53 | 5.16 | |
| | EER | | 2.94 | 2.61 | 2.30 | 3.18 | 2.93 | 2.86 | 2.66 | |
| Air 35°C Water indoor 23°C / outdoor 18°C | Cooling capacity | kW | 4.55 | 6.45 | 8.35 | 10.25 | 12.19 | 14.61 | 14.82 | |
| | Power input | kW | 1.00 | 1.47 | 2.10 | 2.06 | 2.65 | 3.32 | 3.66 | |
| | EER | | 4.55 | 4.40 | 3.97 | 4.98 | 4.60 | 4.40 | 4.05 | |
| PERFORMANCE | | | | | | | | | | |
| Energy label | Water outlet to 35°C | ηs/class | 175.9%/A++ | 178.3%/A++ | 163.3%/A++ | 161.7%/A++ | 165.6%/A++ | 172.7%/A++ | 167.5%/A++ | |
| | Water outlet to 55°C | ηs/class | 125.7%/A++ | 125.7%/A++ | 127.1%/A++ | 129.3%/A++ | 129.3%/A++ | 128.5%/A++ | 125.1%/A++ | |
| SCOP (average climate) | Water outlet to 35°C | | 4.47 | 4.53 | 4.16 | 4.12 | 4.21 | 4.39 | 4.26 | |
| | Water outlet to 55°C | | 3.22 | 3.22 | 3.25 | 3.31 | 3.31 | 3.29 | 3.20 | |
| SEER (average climate) | Water outlet to +7°C | | 4.61 | 4.75 | 4.52 | 5.24 | 5.34 | 4.86 | 4.34 | |
| | Water outlet to 18°C | | 5.90 | 5.74 | 5.69 | 6.22 | 6.64 | 6.18 | 5.88 | |
| Sound level | Heating/Cooling | dB(A) | 61/64 | 65/66 | 68/67 | 66/64 | 67/67 | 71/70 | 71/70 | |
| | | | Cooling mode | | | Heating mode | | | DHW mode | |
| Operating limits | °C | | -5/46 | | | -20/35 | | | -20/43 | |
| Water outlet operating limits | °C | | 5/25 | | | 25/60 | | | 40/60 | |
| POWER SUPPLY | | | | | | | | | | |
| Electric backup heater | Built-in standard | kW | - | - | - | 3 | 3 | 3 | 3 | |
| | Optional | kW | 3 | 3 | 3 | 4.5 | 4.5 | 4.5 | 4.5 | |
| | Number of stages | | 1 | 1 | 1 | 2 | 2 | 2 | 2 | |
| Power supply | V/Ph/Hz | | 220-240/1/50 | | | | | | | |
| Fuse rating | A | | 25 | 25 | 25 | 40 | 40 | 40 | 40 | |
| INSTALLATION & OTHERS | | | | | | | | | | |
| Air flow | m³/h | | 3050 | 3050 | 3050 | 6150 | 6150 | 6150 | 6150 | |
| Refrigerant | Type/GWP | kg | R410A/2088 | | | | | | | |
| | Charge | kg | 2,4 | 2,4 | 2,4 | 3,6 | 3,6 | 3,6 | 3,6 | |
| Outline dimensions (WxHxD) | mm | | 1210x945x402 | | | | 1404x1414x405 | | | |
| Package dimensions (WxHxD) | mm | | 1500x1140x450 | | | | 1475x1580x440 | | | |
| Net weight/Gross weight | kg | | 99/117 | | | | 162/183 | | | |
| Water connection | inches | | 1" Female BSP | | | | 1-1/4" Female BSP | | | |
| Rated water flow | m³/h | | 0.857 | 1.200 | 1.540 | 1.714 | 2.060 | 2.400 | 2.740 | |
| Minimum water flow | m³/h | | 0.686 | 0.960 | 1.232 | 1.371 | 1.648 | 1.920 | 2.192 | |
| Maximum water flow | m³/h | | 1.028 | 1.440 | 1.848 | 2.057 | 2.472 | 2.880 | 3.288 | |

Data according to EN 14511:2013.

PAC BT MONOBLOC TECHNICAL DATA - THREE PHASE

| Models | | | AWHW-PAC-BT-MB-12KW-H13 | AWHW-PAC-BT-MB-14KW-H13 | AWHW-PAC-BT-MB-16KW-H13 |
|---|----------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Code 3~400V-50Hz | | | 7HP061022 | 7HP061023 | 7HP061024 |
| Phases | | | Three phase | Three phase | Three phase |
| HEATING MODE | | | | | |
| Air +7°C Water 30/35°C | Heating capacity | kW | 12.37 | 14.10 | 16.30 |
| | Power input | kW | 2.76 | 3.26 | 3.88 |
| | COP | | 4.48 | 4.33 | 4.20 |
| Air +7°C Water 40/45°C | Heating capacity | kW | 12.02 | 14.11 | 16.06 |
| | Power input | kW | 3.72 | 4.46 | 5.23 |
| | COP | | 3.23 | 3.16 | 3.07 |
| Air +7°C Water 47/55°C | Heating capacity | kW | 12.51 | 14.41 | 16.15 |
| | Power input | kW | 4.43 | 5.16 | 5.86 |
| | COP | | 2.82 | 2.79 | 2.76 |
| Air -7°C Water 30/35°C | Heating capacity | kW | 10.1 | 11.7 | 13 |
| | Power input | kW | 3.9 | 4.4 | 5.1 |
| | COP | | 2.61 | 2.65 | 2.57 |
| COOLING MODE | | | | | |
| Air 35°C Water indoor 12°C / outdoor +7°C | Cooling capacity | kW | 12.58 | 13.80 | 15.26 |
| | Power input | kW | 4.32 | 5.14 | 6.41 |
| | EER | | 2.91 | 2.68 | 2.38 |
| Air 35°C Water indoor 23°C / outdoor 18°C | Cooling capacity | kW | 12.64 | 14.03 | 15.10 |
| | Power input | kW | 2.75 | 3.26 | 3.78 |
| | EER | | 4.60 | 4.30 | 4.00 |
| PERFORMANCE | | | | | |
| Energy label | Water outlet to 35°C | η ^s class | 174.9%/A++ | 167.9%/A++ | 163.6%/A++ |
| | Water outlet to 55°C | η ^s class | 130.9%/A++ | 127.9%/A++ | 125.6%/A++ |
| SCOP (average climate) | Water outlet to 35°C | | 4.45 | 4.27 | 4.17 |
| | Water outlet to 55°C | | 3.35 | 3.27 | 3.22 |
| SEER (average climate) | Water outlet to +7°C | | 5.02 | 4.88 | 4.92 |
| | Water outlet to 18°C | | 5.78 | 5.72 | 5.87 |
| Sound level | Heating/Cooling | dB(A) | 68/69 | 71/70 | 71/71 |
| | | | Cooling mode | Heating mode | DHW mode |
| Operating limits | | °C | -5/46 | -20/35 | -20/35 |
| Water outlet operating limits | | °C | 5/25 | 25/60 | 40/60 |
| POWER SUPPLY | | | | | |
| Electric backup heater | Built-in standard | kW | 4.5 | 4.5 | 4.5 |
| | Number of stages | | 1 | 1 | 1 |
| Power supply | | V/Ph/Hz | 380-415/3/50 | | |
| Fuse rating | | A | 20 | 20 | 20 |
| INSTALLATION & OTHERS | | | | | |
| Air flow | | m³/h | 6150 | 6150 | 6150 |
| Refrigerant | Type/GWP | | R410A/2088 | | |
| | Charge | kg | 3.6 | 3.6 | 3.6 |
| Outline dimensions (WxHxD) | | mm | 1404x1414x405 | | |
| Package dimensions (WxHxD) | | mm | 1475x1580x440 | | |
| Net weight/Gross weight | | kg | 177/198 | | |
| Water connection | | inches | 1-1/4" Female BSP | | |
| Rated water flow | | m³/h | 2.060 | 2.400 | 2.740 |
| Minimum water flow | | m³/h | 1.648 | 1.920 | 2.192 |
| Maximum water flow | | m³/h | 2.472 | 2.880 | 3.288 |

Data according to EN 14511:2013.

PAC BT SPLIT

LOW TEMPERATURE HEAT PUMP



MADE IN EUROPE



+ PRODUCTS

- Wide range of configurations.
- Energy efficiency: 181 % η_s.
- Three services heat pump: reversible and DHW.



RCW15
(optional)

FEATURES



PAC BTE SPLIT
with DHW tank included



PAC BT SPLIT
DHW optional



PAC BT SPLIT
ODU 4-8 kW



PAC BT SPLIT
ODU 10-16 kW



- Compatible with several transmitters: heated floors, radiators, fan-convectors...
- Recovery of free energy from the sun via a solar heat exchanger (DHW only - optional).
- Large integrated control panel on the product (status, diagnosis...).
- 280L integrated hot water storage tank: optimized comfort (depending on model).
- Hydraulic distribution allowing multi-zone management (option).
- Compact outdoor unit: low footprint.

ECONOMIC: HOT SANITARY WATER THANKS TO FREE SOLAR ENERGY



SELECT YOUR SYSTEM

| | Outdoor unit | Indoor unit without DHW | Indoor unit with DHW |
|--------------------------|------------------|-------------------------|----------------------|
| PAC BT 4kW | 7HP061025 | 7HP010007 | 7HP010005 |
| PAC BT 6kW | 7HP061026 | 7HP010007 | 7HP010005 |
| PAC BT 8kW | 7HP061027 | 7HP010007 | 7HP010005 |
| PAC BT 10kW | 7HP061028 | 7HP010008 | 7HP010006 |
| PAC BT 12kW three phase | 7HP061029 | 7HP010008 | 7HP010006 |
| PAC BT 12kW single phase | 7HP061030 | 7HP010008 | 7HP010006 |
| PAC BT 14kW three phase | 7HP061031 | 7HP010008 | 7HP010006 |
| PAC BT 14kW single phase | 7HP061032 | 7HP010008 | 7HP010006 |
| PAC BT 16kW three phase | 7HP061033 | 7HP010008 | 7HP010006 |
| PAC BT 16kW single phase | 7HP061034 | 7HP010008 | 7HP010006 |

PAC BT SPLIT TECHNICAL DATA

| Outdoor units | | | PAC-BT-UE-4KW-H11 | PAC-BT-UE-6KW-H11 | PAC-BT-UE-8KW-H11 | PAC-BT-UE-10KW-H11 | PAC-BT-UE-12KW-H11 | PAC-BT-UE-12KW-H13 | PAC-BT-UE-14KW-H11 | PAC-BT-UE-14KW-H13 | PAC-BT-UE-16KW-H11 | PAC-BT-UE-16KW-H13 | | |
|--|---|---------------------|--------------------------------------|-------------------|-------------------|---------------------|------------------------|--------------------|--------------------------------|--------------------|---------------------|--------------------|-----------------------|--|
| Part number | | | 7HP061025 | 7HP061026 | 7HP061027 | 7HP061028 | 7HP061030 | 7HP061029 | 7HP061032 | 7HP061031 | 7HP061034 | 7HP061033 | | |
| Phases | | | Single phase | Single phase | Single phase | Single phase | Single phase | Three phase | Single phase | Three phase | Single phase | Three phase | | |
| HEATING MODE | | | | | | | | | | | | | | |
| Air +7°C Water 30/35°C | Heating capacity | kW | 4.23 | 6.33 | 8.09 | 9.69 | 12.16 | | 14.16 | | 15.77 | | | |
| | Power input | kW | 0.81 | 1.31 | 1.77 | 2.11 | 2.54 | | 2.91 | | 3.28 | | | |
| | COP | | 5.21 | 4.83 | 4.57 | 4.59 | 4.79 | | 4.87 | | 4.81 | | | |
| Air +7°C Water 40/45°C | Heating capacity | kW | 4.06 | 6.00 | 7.29 | 9.77 | 12.22 | | 14.64 | | 16.44 | | | |
| | Power input | kW | 1.10 | 1.65 | 2.15 | 2.70 | 3.35 | | 3.86 | | 4.42 | | | |
| | COP | - | 3.69 | 3.64 | 3.39 | 3.62 | 3.65 | | 3.79 | | 3.72 | | | |
| Air -7°C Water 30/35°C | Heating capacity | kW | 4.78 | 5.68 | 6.09 | 7.69 | 9.76 | | 11.32 | | 12.06 | | | |
| | Power input | kW | 1.56 | 1.95 | 2.18 | 2.80 | 3.32 | | 3.90 | | 4.14 | | | |
| | COP | | 3.06 | 2.91 | 2.79 | 2.75 | 2.94 | | 2.90 | | 2.91 | | | |
| COOLING MODE | | | | | | | | | | | | | | |
| Air 35°C Water indoor 12°C / outdoor +7°C | Cooling capacity | kW | 4.34 | 6.24 | 7.57 | 9.52 | 11.34 | | 14.15 | | 15.53 | | | |
| | Power input | kW | 1.27 | 2.05 | 2.73 | 3.20 | 4.25 | | 5.14 | | 5.71 | | | |
| | EER | | 3.42 | 3.05 | 2.77 | 2.97 | 2.67 | | 2.75 | | 2.72 | | | |
| Air 35°C Water indoor 23°C / outdoor 18°C | Cooling capacity | kW | 4.47 | 6.19 | 8.01 | 10.16 | 11.39 | | 14.34 | | 15.40 | | | |
| | Power input | kW | 0.80 | 1.29 | 1.81 | 2.03 | 2.59 | | 3.10 | | 3.56 | | | |
| | EER | | 5.58 | 4.80 | 4.43 | 5.00 | 4.40 | | 4.63 | | 4.33 | | | |
| PERFORMANCE | | | | | | | | | | | | | | |
| SCOP (Average climate) Water 47/55°C | Nominal capacity | kW | 4 | 6 | 7 | 10 | 12 | | 14 | | 15 | | | |
| | Energy class - Heat pump only | | A++ | A++ | A++ | A++ | A++ | | A++ | | A++ | | | |
| | ηs - Heat pump only | % | 130 | 127 | 127 | 128 | 129 | | 131 | | 132 | | | |
| | Energy class - System | | A++ | A++ | A++ | A++ | A++ | | A++ | | A++ | | | |
| | ηs - System | % | 135 | 132 | 132 | 133 | 134 | | 136 | | 138 | | | |
| | Energy class - DHW | XL | A | A | A | A | A | | A | | A | | | |
| SCOP (Average climate) Water 30/35°C | Nominal capacity | kW | 4 | 6 | 7 | 10 | 12 | | 14 | | 15 | | | |
| | Energy class - Heat pump only | | A++ | A+++ | A++ | A++ | A+++ | | A++ | | A++ | | | |
| | ηs - Heat pump only | % | 174 | 175 | 171 | 174 | 176 | | 166 | | 164 | | | |
| | Energy class - System | | A+++ | A+++ | A+++ | A+++ | A+++ | | A+++ | | A+++ | | | |
| ηs - System | % | 179 | 180 | 176 | 179 | 181 | | 171 | | 169 | | | | |
| Air flow | m³/h | 3180 | 3180 | 5120 | 6500 | 6500 | | 6500 | | 6500 | | | | |
| Sound pressure at 1 metre | dB(A) | 46 | 48 | 50 | 52 | 54 | | 55 | | 55 | | | | |
| Sound power | dB(A) | 60 | 62 | 65 | 67 | 69 | | 70 | | 70 | | | | |
| Operating limits | °C | Cooling mode | | | | Heating mode | | | | DHW mode | | | | |
| | | -5/46 | | | | -20/35 | | | | -20/43 | | | | |
| POWER SUPPLY | | | | | | | | | | | | | | |
| Power supply | V/Ph/Hz | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 | 400/3/50 | 230/1/50 | 400/3/50 | 230/1/50 | 400/3/50 | | | |
| Maximum amperage | A | 12.10 | 12.40 | 22.00 | 30.00 | 33.00 | 7.00 | 34.00 | 8.90 | 35.00 | 9.40 | | | |
| INSTALLATION & OTHERS | | | | | | | | | | | | | | |
| Minimum system water content ⁽¹⁾ | l | 15 | 22 | 28 | 35 | 42 | | 50 | | 55 | | | | |
| Minimum water flow rate | l/s | 0.17 | 0.17 | 0.17 | 0.25 | 0.25 | | 0.25 | | 0.25 | | | | |
| Maximum water flow rate | l/s | 0.90 | 0.90 | 0.90 | 1.10 | 1.30 | | 1.50 | | 1.70 | | | | |
| Refrigerant pipe min/max equivalent length | m | 2 -20 | 2 -20 | 2 -30 | 2 - 50 | 2 - 50 | | 2 - 50 | | 2 - 50 | | | | |
| Maximum refrigerant pipe height difference with outdoor unit higher/lower than indoor unit | m | 15/20 | 15/20 | 15/20 | 25/30 | 25/30 | | 25/30 | | 25/30 | | | | |
| Gas pipe diameter | inches | 5/8" | 5/8" | 5/8" | 5/8" | 5/8" | | 5/8" | | 5/8" | | | | |
| Liquid pipe diameter | inches | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | | 3/8" | | 3/8" | | | | |
| Refrigerant | Type /GWP | R410A/2088 | | | | | | | | | | | | |
| | Standard charge for connections up to 5 m | kg | 2.5 | 2.5 | 2.8 | 3.9 | 3.9 | 4.2 | 3.9 | 4.2 | 3.9 | 4.2 | | |
| | Additional charge per metre | g/m | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | 54 | | |
| Unit dimensions (WxHxD) | mm | 960x860x380 | | | 1075x965x395 | | 900x1327x400 | | | | | | | |
| Weight | kg | 60 | | | 76 | | 109 | | | | | | | |
| INDOOR UNIT DATA | | | | | | | | | | | | | | |
| Indoor units | | | PAC-BTE-UI-4-8KW-H11 | | | | PAC-BTE-UI-10-16KW-H11 | | | | PAC-BT-UI-4-8KW-H11 | | PAC-BT-UI-10-16KW-H11 | |
| Range | | | Indoor unit with DHW included | | | | | | Indoor unit without DHW | | | | | |
| Part number | | | 7HP010005 | | | | 7HP010006 | | | | 7HP010007 | | 7HP010008 | |
| Volume of DHW tank | | l | 280 | | | | 280 | | | | - | | - | |
| Dimensions | Dimensions (WxHxD) | mm | 600x2040x800 | | | | 600x2040x800 | | | | 462x700x316 | | 462x700x316 | |
| | Operation weight | kg | 450 | | | | 470 | | | | 48 | | 50 | |
| | | | Cooling | | Heating | | Cooling | | Heating | | Cooling | | Heating | |
| Mode characteristics | Power supply | V/Ph/Hz | 230/1/50 | | | | 230/1/50 | | | | 230/1/50 | | 230/1/50 | |
| | Maximum current | A | 9.60 | | 9.6 | | 10.1 | | 10.7 | | 9.30 | | 9.80 | |

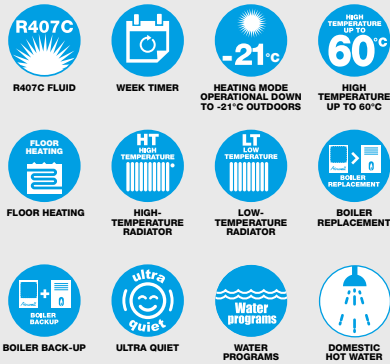
1. Extra tank is not needed, if content of water in the system is higher.



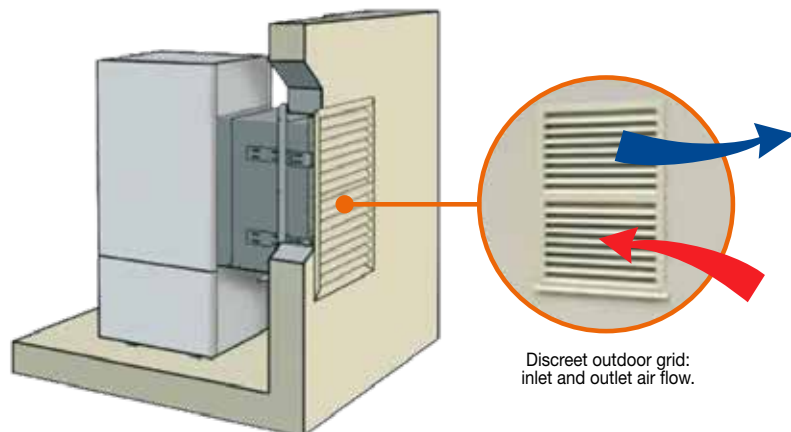
+ PRODUCTS

- No refrigerant handling.
- Aluminium finish.
- Energy efficiency: 148% ηs.
- Electromechanical product.
- Reversible solution.

FEATURES



- Compatible with several transmitters: heated floors, radiators, fan-convectors...
- Performances assured even in very cold weather.
- Very fast domestic hot water production.
- Solution "Plug & Play" to replace the old monobloc heat pump.
- Simplified maintenance: easy access to the main elements (probes, electronic cards...).
- Control panel integrated on the product (status, diagnosis...).
- Stainless Steel DHW tank 300L (option) : optimized comfort.
- Durability: high protection treatment on electronic cards.
- DUO tank : Tank on tank ! Stainless Steel DHW tank 200L and buffer tank 90L. Optimal functioning of the HP. Optimize space (optional) !



Discreet outdoor grid: inlet and outlet air flow.

PAC HOME TECHNICAL DATA

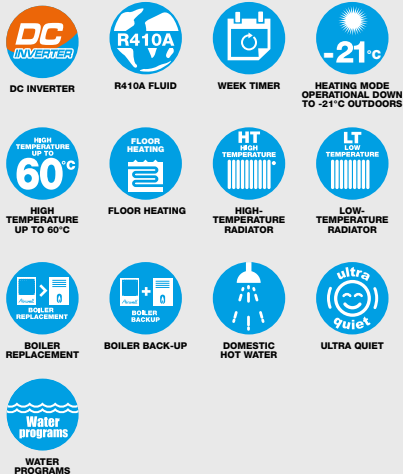
| Models | | AW-PAC HOME -5kW-H11 | AW-PAC HOME -7kW-H11 | AW-PAC HOME -9kW-H11 | AW-PAC HOME -12kW-H11 | AW-PAC HOME -12kW-H13 | AW-PAC HOME -15kW-H13 | AW-PAC HOME -15kW-H11 | AW-PAC HOME -19kW-H11 | AW-PAC HOME -19kW-H13 | AW-PAC HOME -24kW-H13 | |
|--|----------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| Part number | | 7HP061035 | 7HP061036 | 7HP061037 | 7HP061038 | 7HP061039 | 7HP061040 | 7HP061041 | 7HP061042 | 7HP061043 | 7HP061044 | |
| Part number grid + plenum | | 7ACVF0589 | 7ACVF0589 | 7ACVF0590 | 7ACVF0590 | 7ACVF0590 | 7ACVF0591 | 7ACVF0591 | 7ACVF0592 | 7ACVF0592 | 7ACVF0593 | |
| Phases | | Single phase | Single phase | Single phase | Single phase | Three phase | Three phase | Single phase | Single phase | Three phase | Three phase | |
| HEATING MODE | | | | | | | | | | | | |
| Air +7°C Water 30/35°C | Heating capacity | kW | 5.02 | 6.68 | 8.98 | 11.20 | 11.09 | 15.89 | 15.64 | 19.11 | 19.09 | 23.80 |
| | Power input | kW | 1.14 | 1.67 | 2.04 | 2.61 | 2.55 | 3.53 | 3.40 | 4.20 | 4.15 | 5.06 |
| | COP | | 4.40 | 4.00 | 4.40 | 4.29 | 4.35 | 4.50 | 4.60 | 4.55 | 4.60 | 4.70 |
| Air +7°C Water 40/45°C | Heating capacity | kW | 4.90 | 6.19 | 8.56 | 10.60 | 10.60 | 14.75 | 14.75 | 18.30 | 18.30 | 22.92 |
| | Power input | kW | 1.38 | 1.95 | 2.25 | 2.90 | 2.90 | 4.21 | 4.21 | 5.20 | 5.20 | 6.20 |
| | COP | | 3.55 | 3.18 | 3.80 | 3.66 | 3.66 | 3.50 | 3.50 | 3.52 | 3.52 | 3.70 |
| Air +7°C Water 47/55°C | Heating capacity | kW | 4.39 | 5.53 | 7.71 | 9.71 | 9.64 | 13.85 | 13.85 | 16.50 | 16.60 | 20.60 |
| | Power input | kW | 1.60 | 1.97 | 2.77 | 3.52 | 3.36 | 5.00 | 4.79 | 5.87 | 5.73 | 7.29 |
| | COP | | 2.74 | 2.81 | 2.78 | 2.76 | 2.87 | 2.77 | 2.89 | 2.81 | 2.90 | 2.83 |
| Air -7°C Water 30/35°C | Heating capacity | kW | 3.20 | 4.20 | 5.60 | 7.00 | 6.85 | 10.00 | 9.90 | 12.10 | 12.00 | 15.90 |
| | Power input | kW | 1.10 | 1.59 | 1.87 | 2.40 | 2.30 | 3.33 | 3.19 | 4.20 | 3.75 | 5.00 |
| | COP | | 2.91 | 2.64 | 3.00 | 2.92 | 2.98 | 3.00 | 3.10 | 2.88 | 3.20 | 3.18 |
| COOLING MODE | | | | | | | | | | | | |
| Air +7°C Water indoor / outdoor 12/7°C | Cooling capacity | kW | 3.36 | 4.29 | 5.96 | 7.47 | 7.58 | 10.65 | 10.85 | 12.90 | 13.00 | 15.90 |
| | Power input | kW | 1.34 | 1.70 | 2.35 | 2.95 | 2.83 | 4.20 | 4.06 | 4.72 | 4.88 | 6.35 |
| | EER | | 2.51 | 2.52 | 2.54 | 2.53 | 2.68 | 2.54 | 2.67 | 2.73 | 2.66 | 2.50 |
| Air +7°C Water indoor / outdoor 23/18°C | Cooling capacity | kW | 5.04 | 6.37 | 8.85 | 11.1 | 11.20 | 15.70 | 16.00 | 18.90 | 19.20 | 23.40 |
| | Power input | kW | 1.40 | 1.75 | 2.47 | 3.11 | 3.01 | 4.38 | 4.28 | 5.27 | 5.17 | 6.83 |
| | EER | | 3.60 | 3.64 | 3.58 | 3.57 | 3.72 | 3.58 | 3.74 | 3.59 | 3.71 | 3.43 |
| PERFORMANCE | | | | | | | | | | | | |
| Energy label | Water outlet to 35°C | ηs/class | 138/A++ | 131/A++ | 139/A++ | 138/A++ | 146/A++ | 140/A++ | 146/A++ | 145/A++ | 148/A++ | 136/A++ |
| | Water outlet to 55°C | ηs/class | 113/A+ | 111/A+ | 113/A+ | 113/A+ | 112/A+ | 119/A+ | 121/A+ | 114/A+ | 124/A+ | 118/A+ |
| SCOP (average climate) | Water outlet to 35°C | | 3.87 | 3.52 | 3.87 | 3.78 | 3.83 | 3.96 | 4.05 | 4 | 4.05 | 4.13 |
| | Water outlet to 55°C | | 2.42 | 2.47 | 2.45 | 2.43 | 2.52 | 2.43 | 2.54 | 2.47 | 2.56 | 2.49 |
| SEER (average climate) | Water outlet to +7°C | | | | | | | | | | | |
| | Water outlet to 18°C | | 3.96 | 4 | 3.94 | 3.92 | 4.1 | 3.95 | 4.11 | 3.94 | 4.09 | 3.77 |
| Operating limits | Cooling | °C | 20 / 35 | | | | | | | | | |
| | Heating | °C | -21 / 20 | | | | | | | | | |
| | DHW | °C | -21 / 35 | | | | | | | | | |
| Temperature range of water outlet | Cooling | °C | 7 / 25 | | | | | | | | | |
| | Heating | °C | 20 / 60 | | | | | | | | | |
| | DHW | °C | 30 / 55 (-21) | | | | | | | | | |
| Sound power | dB(A) | 40.5 | 41.0 | 41.0 | 41.0 | 42.0 | 42.0 | 42.0 | 43.0 | 43.0 | 43.5 | |
| POWER SUPPLY | | | | | | | | | | | | |
| Electric backup heater (as standard) | kW | 3 | 3 | 3+3 | 3+3 | 3X2 | 3+3 | 3X2 | 3+3 | 3X2 | 3X2 | |
| Power supply | V/ph/Hz | 230/1/50 | 230/1/50 | 230/1/50 | 230/1/50 | 400/3/50 | 230/1/50 | 400/3/50 | 230/1/50 | 400/3/50 | 400/3/50 | |
| Fuse rating | A | 25 | 32 | 50 | 50 | 32 | 63 | 32 | 63 | 32 | 32 | |
| INSTALLATION & OTHERS | | | | | | | | | | | | |
| Air flow | m³/h | 2 200 | 2 200 | 3 750 | 3 750 | 3 750 | 4 400 | 4 400 | 5 950 | 5 950 | 7 500 | |
| Refrigerant | Type/GWP | R407C/1800 | | | | | | | | | | |
| Dimensions (WxDxH) | Heat pump | mm | 704x690x1640 | 904x690x1640 | | | 1344x690x1640 | | | 1544x690x1640 | | 1744x690x1640 |
| | Heat pump packaging | mm | 1000x850x1720 | | | | 1700x1000x1840 | | | 1900x1000x1840 | | 2100x1000x1840 |
| | Grid + plenum | mm | 1200x800x650 | | 1200x1000x650 | | | 1500x1000x650 | | 2000x1000x650 | | |
| Net weight/ Packing weight | Heat pump | kg | 250/265 | 250/265 | 280/295 | 280/295 | 280/295 | 380/400 | 380/400 | 420/440 | 420/440 | 470/490 |
| | Grid + plenum | kg | 40/55 | 40/55 | 45/60 | 45/60 | 45/60 | 100/120 | 100/120 | 125/155 | 125/155 | 135/170 |



+ PRODUCTS

- No refrigerant handling.
- Aluminium finish.
- Three services heat pump: reversible and DHW.
- Electromechanical product.
- Energy efficiency: 149% ηs.

FEATURES



**Maintain power
Even with cold weather !**



- Compatible with several transmitters: heated floors, radiators, fan-convectors...
- Performances assured even in very cold weather.
- Simplified maintenance: easy access to the main elements (probes, electronic cards...).
- Control panel integrated on the product (status, diagnosis...).
- Solution "Plug & Play" to replace the old monobloc heat pump.
- Stainless Domestic Hot Water production tank of 200L: optimized comfort.
- Compact: low footprint.
- Durability: high protection treatment on electronic cards.



PAC HOME+ TECHNICAL DATA




| Models | | | AW-PAC HOME+ -4kW-H11 | AW-PAC HOME+ -6kW-H11 | AW-PAC HOME+ -9kW-H11 |
|--|---------------------------|----------|-----------------------|-----------------------|--|
| Part number | | | 7HP061045 | 7HP061046 | 7HP061047 |
| Phases | | | Single phase | Single phase | Single phase |
| HEATING MODE | | | | | |
| Air +7°C Water 30/35°C | Heating capacity | kW | 4.20 | 6.15 | 9.54 |
| | Power input | kW | 1.00 | 1.41 | 2.16 |
| | COP | | 4.20 | 4.35 | 4.41 |
| Air +7°C Water 40/45°C | Heating capacity | kW | 4.06 | 5.94 | 9.28 |
| | Power input | kW | 1.29 | 1.86 | 2.90 |
| | COP | | 3.15 | 3.20 | 3.19 |
| Air +7°C Water 47/55°C | Heating capacity | kW | 3.95 | 5.77 | 8.65 |
| | Power input | kW | 1.60 | 2.35 | 3.50 |
| | COP | | 2.47 | 2.46 | 2.47 |
| Air -7°C Water 30/35°C | Heating capacity | kW | 4.08 | 5.95 | 9.35 |
| | Power input | kW | 1.30 | 1.89 | 2.70 |
| | COP | | 3.14 | 3.15 | 3.46 |
| COOLING MODE | | | | | |
| Air +7°C Water indoor/outdoor 12/7°C | Cooling capacity | kW | 3.10 | 4.60 | 6.90 |
| | Power input | kW | 1.01 | 1.50 | 2.25 |
| | EER | | 3.06 | 3.07 | 3.06 |
| Air +7°C Water indoor/outdoor 23/18°C | Cooling capacity | kW | 5.40 | 8.10 | 12.15 |
| | Power input | kW | 1.03 | 1.45 | 2.17 |
| | EER | | 5.26 | 5.60 | 5.59 |
| PERFORMANCE | | | | | |
| Energy label | Water outlet to 35°C | ηs/class | 144/A++ | 146/A++ | 149/A++ |
| | Water outlet to 55°C | ηs/class | 112/A+ | 113/A+ | 115/A+ |
| SCOP (average climate) | Water outlet to 35°C | | 3.76 | 3.80 | 3.85 |
| | Water outlet to 55°C | | 2.20 | 2.21 | 2.23 |
| SEER (average climate) | Water outlet to 7°C | | 3.55 | 3.60 | 3.55 |
| | Water outlet to 18°C | | 5.80 | 5.90 | 5.95 |
| Operating limits | Cooling | °C | 20/35 | 20/35 | 20/35 |
| | Heating | °C | -21/20 | -21/20 | -21/20 |
| | DHW | °C | -21/35 | -21/35 | -21/35 |
| Temperature range of water | Cooling | °C | 7/25 | 7/25 | 7/25 |
| | Heating | °C | 20/60 | 20/60 | 20/60 |
| | DHW | °C | 30/55 (-21) | 30/55 (-21) | 30/55 (-21) |
| Sound power (Indoor/Outdoor) | | dB(A) | 59/67.5 | 57.1/65.8 | 57.5/66.0 |
| POWER SUPPLY | | | | | |
| Electric backup heater (as standard) | | kW | 3.00 | 3.00 | 3.00 |
| Power supply | | V/ph/Hz | 230/1/50 | 230/1/50 | 230/1/50 |
| Fuse rating (included) | | A | 16 | 16 | 16 |
| INSTALLATION & OTHERS | | | | | |
| Air flow | m³/h | | 1500 | 2400 | 3500 |
| Refrigerant | Type/GWP | | R410A/2088 | | |
| Dimensions | Heat pump (WxDxH) | mm | 603x645x2300 | 760x695x2300 | 904x690x1580 |
| | DHW tank (Ø x H) | mm | integrated | integrated | 620x1100 |
| Packaging dimensions (WxDxH) | Heat pump | mm | 1000x850x1800 | 1000x850x1800 | 1000x850x1720 |
| | Grid + plenum | mm | integrated | integrated | 1200x1000x650 |
| | DHW tank | mm | 1200x800x1250 | 1200x800x1250 | 1200x800x1250 |
| Net weight/Packing weight | Heat pump + grid + plenum | kg | 180/195 | 220/235 | 280/295 (heat pump) 45/60 (grid + plenum) |
| | Tank | kg | 60/75 | 70/85 | 70/85 |

ALL HEAT PUMPS ACCESSORIES




| PART NUMBER | NAME | FUNCTION |
|--|---|--|
| (included) | Y-shape filter ⓘ | Protect the heat pump from sludging and preserve optimum thermal exchange. |
| 7ACFH0663 | Buffer tank 140 L | It protects the heat pump against short cycles that can reduce the useful life of the compressors and improves operation during defrosting phases. |
|  7ACFH0666 | Settling filter (pot) ⓘ | Protect the heat pump from sludging and preserve optimum thermal exchange. |
|  7ACTL0510 | Floor support rubber recycled (pair) ⓘ Length: 1 000 mm | Necessary for a professional installation. |

ⓘ Mandatory accessory.




PAC BT MB ACCESSORIES

| PART NUMBER | NAME | FUNCTION |
|--|---|---|
|  (included) | User interface kit (digital remote controller) | <ul style="list-style-type: none"> - ON/OFF unit, outside heat source. - Operation mode setting: cooling/heating/auto. - DHW setting: fast DHW / holiday / disinfect. / DHW pump setting. - Temperature setting: water outlet temperature, room temperature. - Time setting: 12h/24. - Timer ON/OFF setting, day/weekly. - Display space heating/cooling set temperature, water tank temperature. - Display components status. - Query, malfunction code, parameter. - Test mode setting. |
| (included) | Thermistor for domestic hot water tank | DHW temperature control. |
|  7ACFH0662 | 300 L domestic hot water tank kit | Optimised with the operation of the heat pump: <ul style="list-style-type: none"> - Programmable anti-legionella function. - Management of the three-way valve / circulator pump couple. - 3.1 m² exchange surface. |
|  7ACFH0822 | On-line electric heater - 3 kW | It provides extra heating when the heating demand is greater than the capacity of the heat pump. It is matching only with sizes 5, 7 and 9. |

PAC BT SPLIT ACCESSORIES

| PART NUMBER | NAME | FUNCTION |
|--|--|--|
|  7ACFH0825 | Electrical complement kit 2/4/6 kW mono PAC BT (recommended) | Allows to ensure additional heating via electrical resistance. |
|  7ACEL1757 | Boiler backup kit PAC BT | Allows to connect a boiler (fuel, gas, wood...). |
| 7ACFH0830 | Auxiliary condensate collection tray | Complementary condensate tray, to increase the maximum condensate recovery volume. |
|  7ACEL1732 | RCW15 Thermostat PAC BT (power supply mandatory) | Temperature and humidity thermostat / Remote keyboard / weekly timer. |
| 7ACEL1733 | Power supply for RCW15 | Power supply kit for RCW15. |

PAC BTE SPLIT WITH DHW ACCESSORIES

| PART NUMBER | NAME | FUNCTION |
|--|---|---|
| 7ACFH0826 | Kit bi-zone 1 temperature PAC BT | Allows to manage two different zones with the same temperature. |
| 7ACFH0827 | Kit bi-zone 2 temperatures PAC BT | Allows to manage two different zones with two temperatures. |
| 7ACEL1750 | Solar connection option for DHW tank  (for solar version) | Solar connection kit allowing the connection with solar thermal panels. |
| 7ACFH0831 | 8 liters expansion vessel kit  (for DHW Version) | Safety element for compensating variations of water volume. |
|  7ACEL1749 | Auxiliary DHW tank 280L PAC BT | Allows to increase the tank capacity of DHW. |
| 7ACFH0833 | 500L DHW tank with coil for solar applications | DHW tank with coil for solar applications (500L). |

 Mandatory accessory.

PAC BT SPLIT WITHOUT DHW ACCESSORIES

| PART NUMBER | NAME | FUNCTION |
|-------------|---|---|
| 7ACFH0823 | Kit bi-zone 1 temperature PAC BT | Allows to manage two different zones with the same temperature. |
| 7ACFH0824 | Kit bi-zone 2 temperatures PAC BT | Allows to manage two different zones with two temperatures. |
| 7ACFH0832 | 300L DHW tank with coil for solar applications | DHW tank with coil for solar applications (300L). |
| 7ACFH0834 | 300L DHW tank | Standard DHW tank (300L). |
| 7ACFH0835 | 500L DHW tank | Standard DHW tank (500L). |
| 7ACEL17683 | DHW temperature sensor | For existing DHW tank. |

PAC HOME/HOME+ ACCESSORIES

| PART NUMBER | NAME | PRODUCT | FUNCTION |
|-------------|---------------------------------|---------------------|--|
| 7ACFH0667 | DHW tank 300L | PAC HOME | Stainless Domestic Hot Water production tank of 300L |
| 7ACFH0670 | Ballon duo 200L PAC HOME | PAC HOME 5 TO 15 kW | Stainless Steel DHW tank 200L and buffer tank 90L. |
| 7ACFH0669 | Kit ECS PAC HOME | PAC HOME | Modulating 3-ways valve + DHW temperature sensor. |
| 7ACEL17682 | Thermostat filaire bus | PAC HOME / HOME+ | Programmable thermostat Carel / reversible. |



DHW production range

| MODEL NAME | | Page | 190 L | 300 L |
|-----------------------------------|-----------|------|-------|-------|
| THERMODYNAMIC DUCTED WATER HEATER | TDF | 32 | ✓ | ✓ |
| | TDF SOLAR | 32 | ✓ | ✓ |

- **Easy** installation
- **Healthy** hot water
- Electricity **savings**





+ PRODUCTS

- Automatic, weekly, anti-legionella function.
- Multiple safeguards: pressure valve, double safeguard against rises in temperature (manual/automatic for TDF 300).
- No contamination risk: the condenser coil is outside the tank.
- Easy to install: closed refrigeration circuit - no intervention required.
- Anode and enamel provide anti-scale and anti-corrosion protection.

FEATURES



- Water output temperature: 38 to 70°C.
- Intelligent functionality mode: economic or electric (TDF 190).
- Automatic regulation (heat pump and electrical resistance): thermal confort and performances.
- Forced mode (electrical resistance).
- Ready to install.
- Absent mode (TDF 300).
- Ideal for family of 4 people.
- Large LCD screen for ease of use.
- Air outlet delivering 25 Pa pressure: option for up to 10 m of duct.
- 4-way valve: automatic defrosting.
- Solar Ready: Integrated solar heat exchanger for 190S and 300S models.
- Energy savings and performance gains thanks to its integrated solar heat exchanger.

ACCESSORIES/OPTIONS

| Accessories | Part number |
|--|-------------|
| Adaptation kit, 90° bend and 1m duct (TDF 190) | 7ACEL1735 |
| Adaptation kit, 90° bend and 1m duct (TDF 300) | 7ACEL1737 |
| Extention kit 1m duct (TDF 190) | 7ACEL1736 |
| Extention kit 1m duct (TDF 300) | 7ACEL1738 |

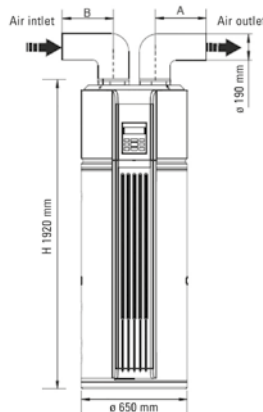
TDF TECHNICAL DATA

| Model | | AWHM-TDF 190/1.5-H31 | AW-TDF190-Solar-H31 | AWHM-TDF300/3.5-H31 | AW-TDF300-Solar-H31 | |
|--|---------------------------|----------------------|---------------------|---------------------|---------------------|-----------|
| Part number | | 7HP030008 | 7HP030010 | 7HP030009 | 7HP030011 | |
| POWER AND PERFORMANCE | | | | | | |
| Toutlet 5/12°C (DB/WB), Tw,in 15°C Tw,in 45°C | Heating capacity | kW | 1,62 | 1,62 | 2,30 | 2,30 |
| | Total power input | kW | 0,42 | 0,42 | 0,53 | 0,53 |
| | COP | | 3,86 | 3,86 | 4,34 | 4,34 |
| Toutlet 43/26°C (DB/WB), Tw,in water 10°C Tw,out 70°C--> 190 Tw,out 65°C--> 300 | Heating capacity | | 2,31 | 2,31 | 3,25 | 3,25 |
| | Total power input | | 0,546 | 0,546 | 0,627 | 0,627 |
| | COP | | 4,23 | 4,23 | 5,18 | 5,18 |
| Electrical resistance | kW | 3,00 | 3,00 | 3,00 | 3,00 | |
| Standard power supply | V | 220-240/1/50 | | | | |
| Heating time DHW ⁽¹⁾ | h/min | 3/53 | 3/53 | 4/22 | 4/22 | |
| Maximum temperature DHW | °C | 70 | 70 | 65 | 65 | |
| Acoustic pressure level (1 m) | dB(A) | 44 | 44 | 44 | 44 | |
| Sound level (volume) (LWA) | dB(A) | 58 | 58 | 59 | 59 | |
| ERP | | | | | | |
| Thermodynamic water heaters (average climate) ⁽²⁾ | Energy class of generator | | A+ | A+ | A+ | A+ |
| | η _{wh} | % | 115 | 115 | 123 | 123 |
| | Annual consumption (AEC) | kWh | 890 | 890 | 1356 | 1356 |
| | Daily consumption | kWh | 4,22 | 4,22 | 6,34 | 6,34 |
| Thermodynamic water heaters (warmer climate) ⁽³⁾ | η _{wh} | % | 125 | 125 | 143 | 143 |
| | Annual consumption (AEC) | kWh | 819 | 819 | 1173 | 1173 |
| | Daily consumption | kWh | 3,86 | 3,86 | 5,49 | 5,49 |
| | COP | | 2,76 | 2,76 | 3,01 | 3,01 |
| Thermodynamic water heaters (cold climate) ⁽⁴⁾ | η _{wh} | % | 99 | 99 | 91 | 91 |
| | Annual consumption (AEC) | kWh | 1034 | 1034 | 1845 | 1845 |
| | Daily consumption | kWh | 4,90 | 4,90 | 8,56 | 8,56 |
| | COP | | 2,76 | 2,76 | 3,01 | 3,01 |
| DHW TANK | | | | | | |
| Hot water tank volume | l | 176 | 176 | 284 | 284 | |
| Maximal service pressure | bar | 10 | 10 | 10 | 10 | |
| Refrigerant type / GWP | | R134a /1430 | | | | |
| Refrigerant charge | | 1,10 | 1,10 | 1,50 | 1,50 | |
| Fan type | | Centrifuge | Centrifuge | Centrifuge | Centrifuge | |
| Air flow | | 270 | 270 | 414 | 414 | |
| Dimensions (H x Ø) | mm | 1830 x 610 | 1830 x 610 | 1930 x 700 | 1930 x 700 | |
| Operating weight | kg | 287 | 310 | 412 | 435 | |

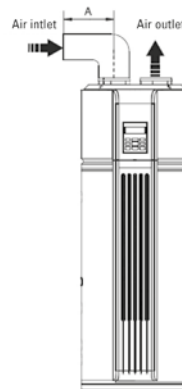
1. Inlet water temperature 15 °C, storage setpoint 45 °C, air source side 15 °C DB / 12 °C WB.
2. The product complies with the European ErP Directive, which includes Delegated Regulations (EU) No. 812/2013 and 814/2013, Medium Climate, Thermodynamic Water Heaters.
3. The product complies with the European ErP Directive, which includes Delegated Regulations (EU) No. 812/2013 and 814/2013, Hot Climate, Thermodynamic Water Heaters.
4. The product complies with the European ErP Directive, which includes Delegated Regulations (EU) No. 812/2013 and 814/2013, Cold Climate, Thermodynamic Water Heaters.



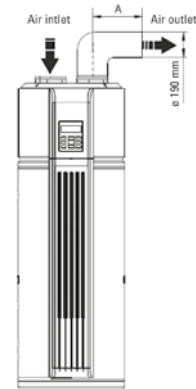
1 Inlet and outlet ducted



2 Inlet ducted



3 Outlet ducted



| Location | Heated low volume room (< 20 m³) | Low volume room (< 20 m³) which can be refreshed | Heated high volume room (> 20 m³) (kitchen, bathroom...) |
|---------------------------------|--|--|---|
| Air inlet and air outlet | <ul style="list-style-type: none"> ■ Air inlet: outdoor air or extracted air (exhaust ventilation) ■ Air outlet: to adjacent room or outdoor | <ul style="list-style-type: none"> ■ Air inlet: outdoor air or extracted air (exhaust ventilation) ■ Air outlet: in the room (ambient air) | <ul style="list-style-type: none"> ■ Air inlet: Ambient air ■ Air outlet: To adjacent room or outdoor |

Airflow & Air to air heat pump ranges

| MODEL NAME | Page | System | Function |
|---|------|----------|----------------------|
| <p>AIRFLOW</p> <p>THERMODYNAMIC CMV DUAL FLOW</p> <p>AIRFLOW 2020</p>  | 36 | Monobloc | Airflow |
| <p>AIR/AIR HEAT PUMP</p> <p>DUCTED MEDIUM STATIC PRESSURE MONOSPLIT</p> <p>DLSE+VAV</p>  | 38 | Split | Cooling / Heating |

- **Ultra pure** air
- One solution **for the whole house**
- **Economic** system





+ PRODUCTS

- High efficiency.
- COP until 5.57.
- Heat pump integrated.
- Monobloc solution.

FEATURES



DC INVERTER



R410A FLUID



ULTRA QUIET



REMOTE CONTROL LOCK



UNIT ON INPUT



- Three sizes available to provide 200, 300 or 500 m³/h.
- Supply of pre-heated or pre-cooled fresh air to buildings.
- Air quality guaranteed by its filtration system.
- Ventilation system with heat recovery by integrated heat pump.
- New air entering the building at a minimum of 17 °C.
- Ultra-pure air thanks to ioniser filtration that eliminates bacteria and dust (option).

WINTER OPERATION



- A: Exhaust air inlet
- B: Evaporator
- C: Exhaust air outlet
- D: Fresh air
- E: Condenser
- F: Preheat / Pre-cooled Air

OPTIONS

| Accessory | Part number | Function |
|------------------------------------|-------------|---|
| Ionizer filter Airflow 200-300 | 7ACVF0583 | Optimal air filtration (H10 equivalent) |
| Ionizer filter Airflow 500 | 7ACVF0584 | Optimal air filtration (H10 equivalent) |
| Extract air filter Airflow 200-300 | 7ACVF0585 | Limit the exchanger fouling |
| Extract air filter Airflow 500 | 7ACVF0586 | Limit the exchanger fouling |

AIRFLOW 2020 TECHNICAL DATA

| Indoor units | | AW-AIRFLOW200-N11 | AW-AIRFLOW300-N11 | AW-AIRFLOW500-N11 |
|--|---------|-------------------|-------------------|-------------------|
| Part number | | 7HP080001 | 7HP080002 | 7HP080004 |
| HEATING MODE - AIR +7°C | | | | |
| Heating capacity | kW | 1.81 | 2.33 | 3.58 |
| Total power input | kW | 0.44 | 0.59 | 0.84 |
| COP | - | 4.11 | 3.95 | 4.27 |
| HEATING MODE - AIR -5°C | | | | |
| Heating capacity | kW | 1.86 | 2.35 | 3.74 |
| Total power input | kW | 0.36 | 0.43 | 0.67 |
| COP | - | 5.17 | 5.47 | 5.57 |
| COOLING MODE - AIR 30°C | | | | |
| Cooling capacity | kW | 1.57 | 2.10 | 3.01 |
| Total power input | kW | 0.54 | 0.70 | 1.04 |
| EER | - | 2.91 | 3.00 | 2.91 |
| COOLING MODE - AIR 35°C | | | | |
| Cooling capacity | kW | 1.63 | 2.17 | 3.13 |
| Total power input | kW | 0.57 | 0.73 | 1.1 |
| EER | - | 2.86 | 2.97 | 2.86 |
| PERFORMANCE | | | | |
| Max. static pressure supply fan | Pa | 120 | 120 | 120 |
| Sound pressure level ⁽¹⁾ | dB(A) | 39 | 41 | 44 |
| POWER SUPPLY | | | | |
| Standard power supply | V/Ph/Hz | 230/1/50 | 230/1/50 | 230/1/50 |
| INSTALLATION & OTHERS | | | | |
| Supply airflow | l/s | 55.0 | 83.0 | 138.89 |
| Min. inlet air temperature (D.B.) ⁽²⁾ | °C | -15 | -15 | -15 |
| Refrigerant / GWP | | R410A / 2088 | R410A / 2088 | R410A / 2088 |
| Charge | kg | 0.8 | 0.75 | 1.0 |

(1) The sound levels refer to the unit at full load, in the rated test conditions.

The sound pressure level refers to a distance of 1m from the external surface of the units operating in an open field.

(2) In places where temperatures drop under -5°C for a considerable number of hours a year, it is recommended to use - electric duct heaters kit.

All the data provided meets standard EN 14511:2013 and refers to an available head of 50 Pa. When in cooling mode it is possible that the unit is operating at a reduced flow to ensure a specific humidity for the air introduced into the environment in keeping with the setpoint.

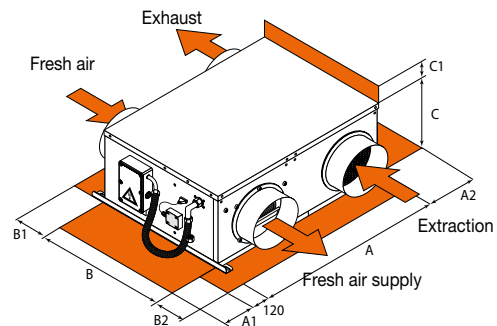
A7 External air temperature +7°C D.B./ 6°C W.B., Exhaust air temperature 20°C D.B./ 15°C W.B.

A-5 External air temperature -5°C D.B./ -5.4°C W.B., Exhaust air temperature 20°C D.B./ 15°C W.B.

A30 External air temperature 30°C D.B./ 22°C W.B., Exhaust air temperature 27°C D.B./ 19°C W.B.

A35 External air temperature 35°C D.B./ 24°C W.B., Exhaust air temperature 27°C D.B./ 19°C W.B.

| DIMENSIONS | | | | |
|------------------|----|-----|-----|------|
| Size | | 200 | 300 | 500 |
| A - Length | mm | 922 | 922 | 1158 |
| B - Width | mm | 704 | 704 | 751 |
| C - Height | mm | 364 | 364 | 423 |
| A1 | mm | 620 | 620 | 620 |
| A2 | mm | 20 | 20 | 20 |
| B1 | mm | 300 | 300 | 300 |
| B2 | mm | 300 | 300 | 300 |
| C1 | mm | 20 | 20 | 20 |
| Operating weight | kg | 70 | 75 | 95 |



CAUTION! For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the orange areas.



Unique
solution

DLSE Plus VAV

Variable Air Volume



Zone control: Ideal temperature in each room

**THE SOLUTION DLSE + VAV ALLOWS
UP TO 30% SAVINGS (installation and equipment)
IN RELATION TO STANDARD SYSTEMS**

- Invisible solution to heat and refresh the whole house.
- Super quiet running.
- Inexpensive installation (less tubing work...).
- Low-cost system (only one indoor unit).



ZONE CONTROL FUNCTION

- Smart air conditioning: Controls up to 6 rooms.
- Each zone has a standalone remote control, to control temperature, "I Feel" and ON/OFF.
- Option to define automatic damper movement or manually to keep max. opening position.
- By-pass damper operates according to system load, which ensures air circulation in the indoor unit.
- Auto-mode: automatically recognizes cooling or heating mode.
- Motorized damper with DC step motor for accurate damper position.
- The blowing dampers change their position (open/close), in accordance with the temperature setpoint indoor in each room, which keeps required temperature.

EASY INSTALLATION

- Simple wiring connection by connectors and set up.
- Up to 70m between indoor and outdoor units.
- Monosplit indoor unit: time saving (little tubing).
- Option for installing the control box besides the unit.
- Water pump and overflow switch built in.

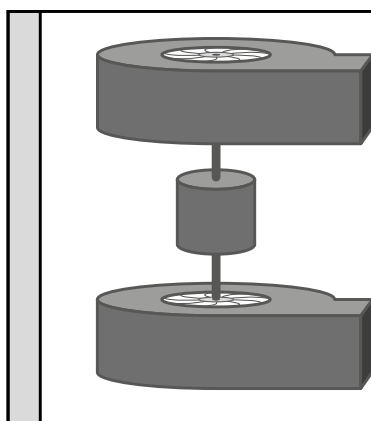
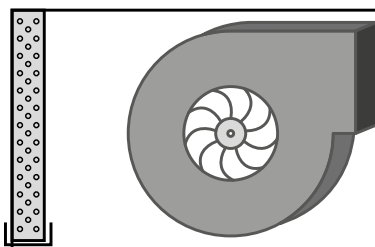
Good to know!

Use our design document to select easily your system.
Ask us this helpful file: mkg@airwell-res.com

SPECIAL DESIGN FOR YOUR CONVENIENCE

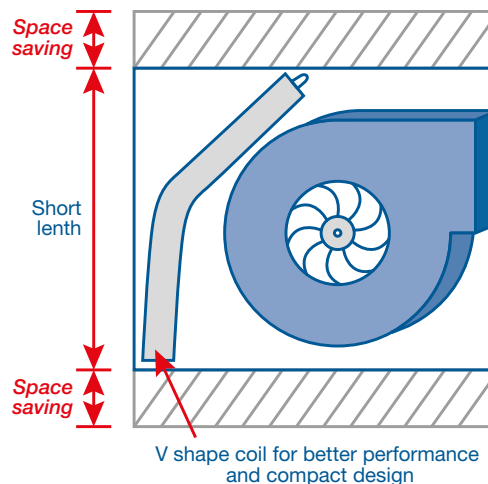
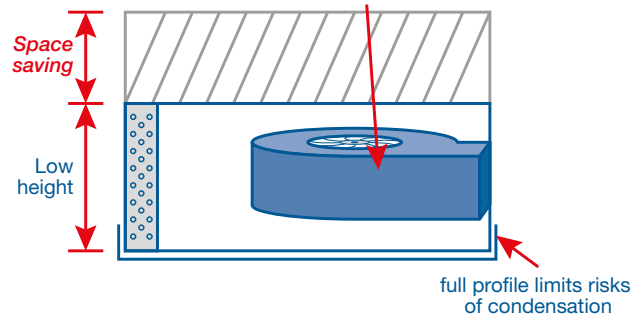
- Unique V shape coil.
- Extra slim indoor unit (low height: 256 mm only).

STANDARD DESIGN



DLSE

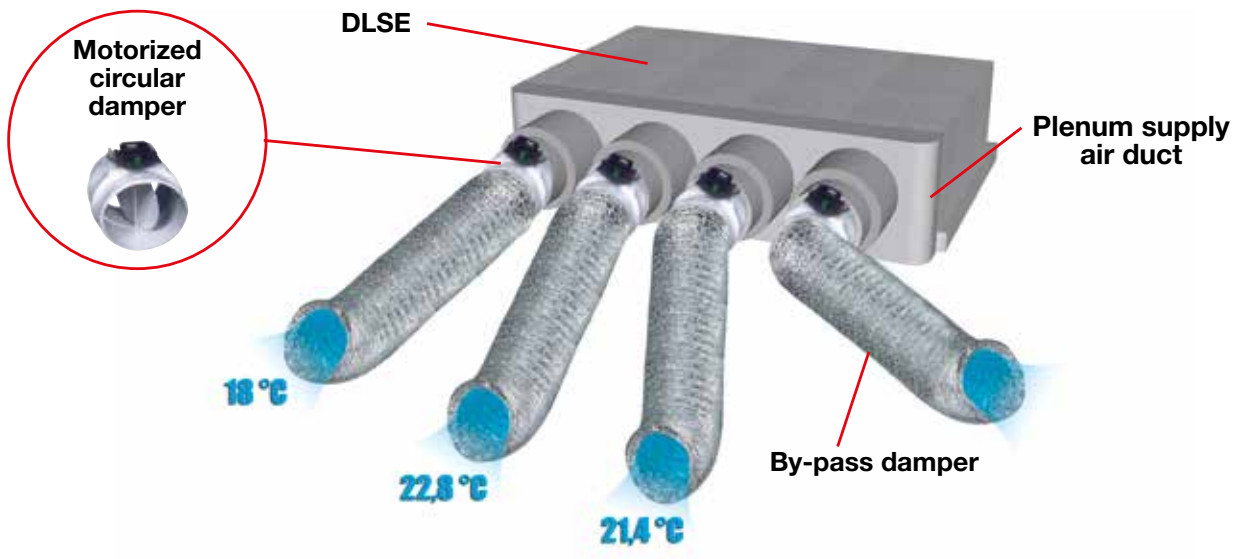
Horizontal fan, higher air volume + high static pressure



How to order?

- The main controller is identical except the set up which is done during the installation.
- After that, select motorized round damper, by-pass damper and plenum (see table below).

ROUND APPLICATION



MOTORIZED ROUND TYPE ACCESSORIES

| Part description | Part number |
|--|-------------|
| DLSE kit (mandatory) | 7ACEL1745 |
| Main controller VAV kit (mandatory) | 7ACEL1641 |
| Motorized round damper (D=155 mm) kit (Wireless controller C85-R included) | 7ACEL1657 |
| Motorized round damper (D=200 mm) kit (Wireless controller C85-R included) | 7ACEL1649 |
| Motorized round damper (D=250 mm) kit (Wireless controller C85-R included) | 7ACEL1650 |
| Motorized by-pass round damper (D=200 mm) kit | 7ACEL1651 |
| Motorized by-pass round damper (D=250 mm) kit | 7ACEL1652 |

PLENUM ACCESSORIES: ROUND APPLICATION

| Part description | Models | Part number |
|---|---------------|-------------|
| 4 outlets in 200 mm + 1 bypass 200 mm (1 obturator 200 mm included) | DLSE 18/24/30 | 7ACVF0130 |
| 4 outlets in 200 mm + 2 outlets in 160 mm + 1 bypass in 200 mm (1 obturator 200 mm included) | DLSE 18/24/30 | 7ACVF0131 |
| 3 outlets in 200 mm + 1 bypass in 200 mm (intake) (2 obturators 200 mm included) | DLSE 18/24/30 | 7ACVF0132 |
| 4 outlets in 200 mm + 1 bypass in 200 mm (1 obturator 200 mm included) | DLSE 36/43 | 7ACVF0133 |
| 4 outlets in 200 mm + 2 outlets in 160 mm + 1 bypass 200 mm (1 obturator 200 mm included) | DLSE 36/43 | 7ACVF0134 |
| 3 outlets in 250 mm+1 bypass in 200 mm (intake) (2 obturators in 250 mm included) | DLSE 36/43 | 7ACVF0135 |



+ PRODUCTS

- Variable Air Volume Solution.
- Water pump included.
- Quiet mode.



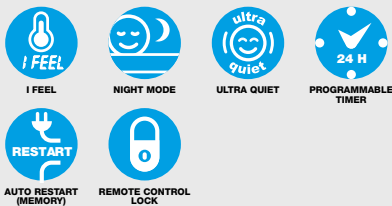
RCW2 included C85-R (included with damper) RC08W (optional)

FEATURES

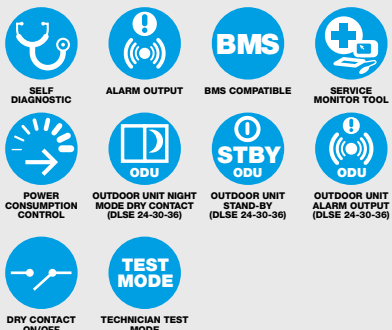
TECHNOLOGY:



USER FUNCTIONS:



INSTALLER FUNCTIONS:



- Comfort "I Feel": temperature sensor in RC08W remote control.
- Energy savings via variation of the airflow of the outdoor unit.
- A set temperature in each room with a single monosplit system.
- Guaranteed energy saving through weekly programming.
- Anti-corrosive treatment that increases the life of the unit.



GLOBAL AND INVISIBLE SOLUTION FOR YOUR HOME

| OPTIONS | | | |
|---------------------------|-------------|-------|---|
| Accessory | Part number | Photo | Function |
| Wireless controller RC08W | 7ACEL1741 | | Operation mode, sleep mode, timer, I Feel, swing, clean mode... |



DLSE TECHNICAL DATA

| Indoor units | | AWSI-DLSE018-N11 | AWSI-DLSE024-N11 | AWSI-DLSE030-N11 | AWSI-DLSE036-N11 | | AWSI-DLSE043-N11 | |
|---|--------|-------------------|--------------------|--------------------|---------------------|---------------------|------------------|-----------------|
| Outdoor units | | AWAU-YBDE018-H11 | AWAU-YBDE024-H11 | AWAU-YBDE030-H11 | AWAU-YBD036-H11 | AWAU-YBD036-H13 | AWAU-YBD042-H11 | AWAU-YAD042-H13 |
| Phase | | Single phase | Single phase | Single phase | Single phase | Three phase | Single phase | Three phase |
| COOLING | | | | | | | | |
| Rated power (min./max.) | kW | 5.0 (2.3-5.9) | 6.8 (1.7-7.4) | 7.5 (2.8-8.4) | 9.5 (4.8-12.5) | 9.5 (4.8-12.5) | 12.5 (4.5-14.5) | 12.5 (4.5-14.5) |
| Pdesignc | kW | 5.0 | 6.8 | 7.5 | 9.5 | 9.5 | - | - |
| Rated power input | kW | 1.22 | 1.93 | 2.02 | 3.47 | 3.04 | 3.73 | 3.56 |
| SEER/Energy label | | 5.8/A+ | 5.4/A | 6.2 / A++ | 6.2 / A++ | 4.7/B | 3.35/A | 3.51/A |
| Operating limits | °C | -10°/46° Dry bulb | | | | | | |
| HEATING | | | | | | | | |
| Rated power (min./max.) | kW | 5.6 (1.9-7.5) | 7.6 (1.8-8.5) | 8.6 (2.8-9.4) | 10.5 | 11.6 (4.9-12.5) | 14.0 (4.5-16.0) | 14.0 (4.5-16.0) |
| Pdesignh | kW | 5.5 | 7.5 | 8.6 | 9.5 | 10.5 | - | - |
| Rated power input | kW | 1.35 | 1.88 | 2.26 | 2.46 | 3.00 | 4.1 | 3.99 |
| SCOP/Energy label (average climate) | | 3.9/A | 3.8/A | 4.0 / A+ | 4.0 / A+ | 3.9/A | 3.41/A | 3.51/A |
| SCOP/Energy label (warmer climate) | | 4.6/A++ | 4.9/A++ | 5.2/A+++ | 4.8/A++ | 4.7/A++ | - | - |
| Operating limits | °C | -15°/24° Dry bulb | | | | | | |
| Power @ -10°C | kW | 5.3 | 5.8 | 7.1 | 6.9 | 8.9 | 9.3 | 9.3 |
| Power @ -15°C | kW | 4.7 | 5.2 | 6.3 | 6.2 | 8.0 | 8.3 | 8.3 |
| INDOOR UNIT | | | | | | | | |
| Sound pressure level to 1 m (LS/MS/HS/SS) | dB(A) | 35/38/41/43 | 38/42/45/48 | 39/43/46/48 | 41/45/46/48 | 41/45/46/48 | 42/46/53 | 42/46/53 |
| Sound power level (LS/MS/HS/SS) | dB(A) | 52/55/58/60 | 55/59/62/65 | 56/60/63/65 | 56/61/63/65 | 56/61/63/65 | 57/61/70 | 57/61/70 |
| Airflow (LS/MS/HS/SS) | m³/h | 740/875/1060/1150 | 870/1090/1220/1410 | 950/1140/1290/1410 | 1290/1550/1670/1750 | 1290/1550/1670/1750 | 1315/1530/2025 | 1315/1530/2025 |
| External static pressure Range | Pa | 25 (25-60) | 25 (25-80) | 25 (25-80) | 37 (37-100) | 37 (37-100) | 50 (50-100) | 50 (50-100) |
| Dehumidification | l/h | 1.5 | 2.3 | 2.7 | 3.5 | 4.6 | 3.3 | 3.8 |
| Outline dimensions (WxHxD) | mm | 790x256x749 | 790x256x749 | 790x256x749 | 854x297x816 | 854x297x816 | 854x297x816 | 854x297x816 |
| Package dimensions (WxHxD) | mm | 960x300x855 | 960x300x855 | 960x300x855 | 1005x345x915 | 1005x345x915 | 1005x345x915 | 1005x345x915 |
| Net weight/Gross weight | kg | 29/31.5 | 30/32.5 | 31/33.5 | 33/35.5 | 33/35.5 | 33/35.5 | 33/35.5 |
| Part number | | 7SP032154 | 7SP032155 | 7SP032156 | 7SP032157 | 7SP032157 | 7SP032087 | 7SP032087 |
| OUTDOOR UNIT | | | | | | | | |
| Sound pressure level to 1 m | dB(A) | 53 | 55 | 56 | 58 | 58 | 58 | 58 |
| Sound power level | dB(A) | 65 | 67 | 68 | 69 | 69 | 70 | 70 |
| Airflow | m³/h | 2500 | 2750 | 3400 | 4150 | 4150 | 5700 | 5700 |
| Compressor type | | Twin Rotary DCI | Twin Rotary DCI | Twin Rotary DCI | Twin Rotary DCI | Twin Rotary DCI | Scroll DCI | Twin Rotary DCI |
| Outline dimensions (WxHxD) | mm | 900x700x340 | 900x700x340 | 900x860x340 | 900x970x340 | 900x970x340 | 900x1250x340 | 900x1250x340 |
| Package dimensions (WxHxD) | mm | 985x730x435 | 985x730x435 | 985x905x435 | 985x1020x435 | 985x1020x435 | 980x1400x420 | 980x1400x420 |
| Net weight/Gross weight | kg | 56/58.5 | 61/63.5 | 66 / 68.5 | 80 / 82.8 | 85/87.8 | 110/121 | 110/121 |
| Part number | | 7SP061886 | 7SP061887 | 7SP061922 | 7SP061923 | 7SP061900 | 7SP061815 | 7SP061757 |
| POWER SUPPLY | | | | | | | | |
| Phase/Tension/Frequency | | 1P/230V/50Hz | 1P/230V/50Hz | 1P/230V/50Hz | 1P/230V/50Hz | 3P/400V/50Hz | 1P/230V/50Hz | 3P/400V/50Hz |
| Power supply side | | Ind. & Out. | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor |
| Power cable section | mm² | 3x2.5 | 3x2.5 | 3x2.5 | 3x4.0 | 5x2.5 | 3x6.0 | 5x2.5 |
| Fuse rating am (D curve) | A | 20 | 20 | 20 | 25 | 3x16 | 32 | 3x16 |
| Electrical connections | mm² | 4x1.5 | 4x1.5 | 4x1.5 | 3x1.5 + 2x0.75 | 3x1.5 + 2x0.75 | 3x1.5 + 2x0.75 | 3x1.5 + 2x0.75 |
| PIPE LINE | | | | | | | | |
| Suction pipe diameter | inches | 1/2" | 5/8" | 5/8" | 5/8" | 5/8" | 3/4" | 3/4" |
| Liquid pipe diameter | inches | 1/4" | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 3/8" |
| Max. length | m | 30 | 30 | 50 | 70 | 70 | 70 | 70 |
| Max. height | m | 15 | 15 | 25 | 30 | 30 | 30 | 30 |
| Refrigerant / GWP | | R410A/2088 | R410A/2088 | R410A/2088 | R410A/2088 | R410A/2088 | R410A/2088 | R410A/2088 |
| Charge (precharge length) | kg | 1.55 (15m) | 2.3 (15m) | 2.1 (15m) | 2.5 (30m) | 2.5 (30m) | 3.3 (30m) | 3.2 (30m) |
| Additional charge | g/m | 35 | 35 | 50 | 30 | 30 | 40 | 40 |

COMBINATIONS

| Indoor unit | Compatible with outdoor unit |
|---|---|
| Ducted | Monosplit |
| DLSE 18 | YBDE |
|  |  |
| DLSE 24 to 43 | YBDE |
|  |  |



Tool box

CALCULATION OF NEEDS

Calculate your needs by using the following formula:

$$D = G \times V \times \Delta T$$

- **D** represents heat loss in watts.
- **G** is the volume ratio of heat loss, corresponding to the insulation of the house (in W/m³/°K).
- **V** is volume of the house in m³.
- **ΔT** is the difference between the basic outdoor temperature and the indoor temperature.

This balance does not replace the one performed by a design office, which is recommended for all types of installations, in particular for specific buildings (architecture, insulation, etc.).

| EXAMPLES | |
|--|----------------|
| New build (very well insulated) | G = 0.4 |
| Insulated house | G = 0.9 |
| Modern house | G = 1.0 |
| Poorly insulated old house (standard wall) | G = 1.3 |
| Veranda | G = 2.5 to 3.0 |

HEAT PUMP SELECTION

→ SELECT HEAT PUMP CAPACITY DEPENDS ON HEAT LOSSES:

1. Sizing a PAC HT and its electrical backup or boiler (ON/OFF bi-compressor solution)

- 70% of losses ≤ Heating capacity of the heat pump ≤ 100% of losses
- 120% of losses = Total power delivered by the heat pump + backup (electrical or fossil energy).
- External temperature basis ≤ Low limit of operating temperature of the heat pump - 5°C.

2. Sizing a PAC BT and its electrical backup or boiler (DC Inverter bi-compressor solution)

- 80% of losses ≤ Heating capacity of the heat pump ≤ 100% of losses
- 120% of losses = Total power delivered by the heat pump + backup (electrical or fossil energy).
- External temperature basis ≤ Low limit of operating temperature of the heat pump - 5°C.

DHW POWER CALCULATION

Needs for Domestic Hot Water

| Number of people in the home | 1 | 2 | 3 | 4 | 5 |
|--|---------|---------|---------|---------|---------|
| Daily water needs by person (in liters of water at 40 °C) | 80 ± 35 | 60 ± 25 | 50 ± 20 | 45 ± 20 | 45 ± 20 |

Preparation with pure accumulation: the DHW is produced in 6 or 8 hours.

Equivalent volume at 60°C :

$$V_{60} = V_x \frac{T_x - 10^\circ}{60^\circ - 10^\circ}$$

with: T_x : Storage temperature of the DHW tank
 V_x : water volume at storage temperature T_x

Step 1: Drawn energy during the day

It consists in calculating the maximum volume of hot water (equivalent to 60°C) drawn during the highest day of the year.

The energy drawn via hot water is given by the formula:

$$E_{acc} = 1,16 V_{60acc} (60^\circ - 10^\circ) / 1000$$

with: E_{acc} = drawn energy during a full day in kW/h
 V_{60acc} = total hot water drawn during a day, including all usage, adjusted to 60°C, in liters
1,16/1000 = adjustment coefficient
10° = cold water temperature

Step 2: Storing volume and exchanger capacity

Storage tank volume given in liters by:

$$\text{Volume} = \frac{1000 \times E_{acc}}{1,16 \times (T_{ec} - 10^\circ) \times a}$$

with: T_{ec} = water temperature in the tank (between 55 and 60°C)
10° = cold water temperature, being the minimum temperature reached by the water in the tank while guarantying users comfort
a = storage efficiency coefficient (between 0,8 and 0,95)

The exchanger capacity, given in kW by the following formula, allows to recover the hot water stock in 6 or 8 hours.

$$\text{Heat exchanger capacity (DHW)} = \frac{E_{acc}}{6 \text{ to } 8h \times 0,9} + P_{dis}$$

with: P_{dis} = losses in distribution circuit. In case of a distribution loop, it will be the power needed for maintaining the temperature in the loop
0,9 = add-on factor, compensating the storage losses during the stock recovering period

Generally, a minimum power of 10 to 12 W/l by stored liter.

HELP FOR DIMENSIONING THE HYDRAULIC ACCESSORIES

■ Buffer volume

Airwell recommends a minimal water capacity being plugged to the heat pump. This capacity allows:

- To ensure a sufficient inertia
- Maintain a minimum run time of the compressor (anti short cycle)

Buffer volume range for a PAC BT (runtime 6 min):

| | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|
| Heat pump power (in kW) with +7°C/35°C conditions | 4 | 6 | 8 | 10 | 12 | 14 | 16 |
| Reduced power down to 20% for an Inverter heat pump (in kW) | 1.2 | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 |
| Buffer volume capacity (in liters) | 20 | 30 | 40 | 50 | 60 | 70 | 80 |

Buffer volume range for a PAC HT (runtime 6 min):

| | | | | | | | |
|--|----|-----|-----|-----|-----|-----|-----|
| Heat pump power (in kW) with +7°C/35°C conditions | 4 | 6 | 8 | 10 | 12 | 14 | 16 |
| Buffer volume capacity (in liters) | 70 | 100 | 140 | 170 | 200 | 240 | 280 |

■ Expansion tank

The sizing of the expansion tank is to be done based on heating mode and allows to calculate:

- The inflation pressure
- Its capacity

The inflation pressure must be higher than the static pressure of the installation in such a way that, on cold cycle, the water can't come into the tank and the volume is optimum for absorbing the water dilatation.

The tank capacity must allow to collect the expansion volume of the installation.

For a pressure setting at 3 bars and a water installation at 45°C, we can use:

| Maximum capacity of the installation (in liters) | Expansion tank capacity (in liters) for a static height until: | | |
|--|--|------|------|
| | 5 m | 10 m | 15 m |
| 200 | 4 | 5 | 8 |
| 250 | 5 | 7 | 10 |
| 300 | 6 | 8 | 12 |
| 400 | 8 | 11 | 16 |
| 500 | 10 | 14 | 20 |

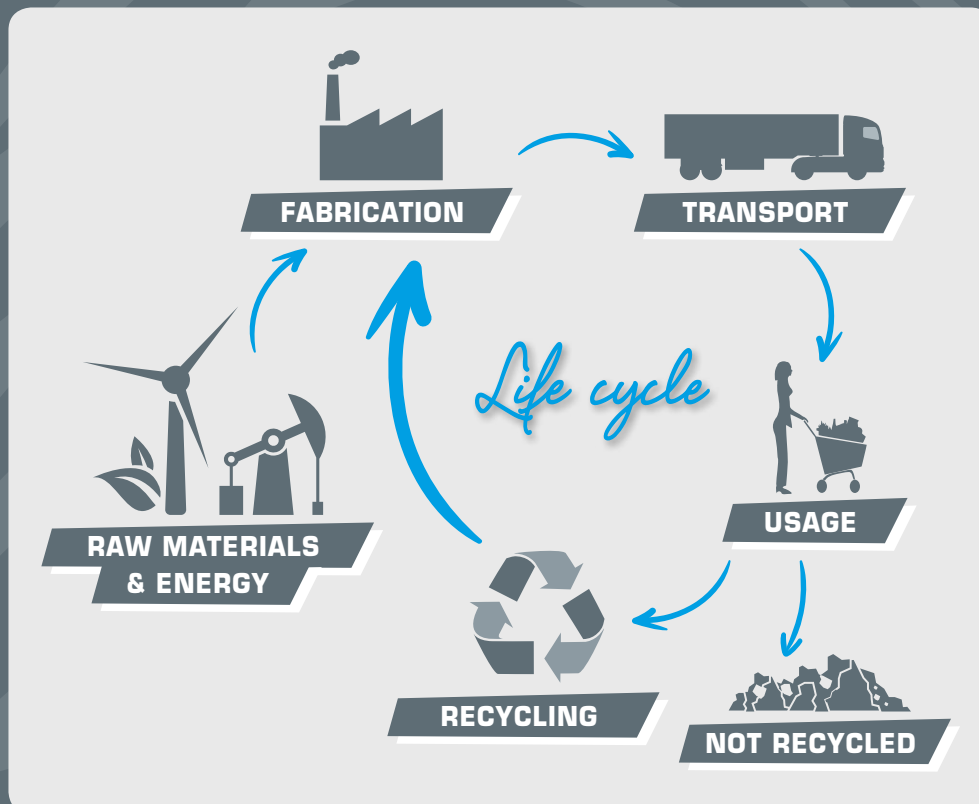
PEP - Ecopassport®



Airwell is part of an eco-environmental approach including a life cycle analysis of our products while building a Product Environmental Profile (PEP).

This life cycle analysis (LCA) allowed to inventory and quantify, all along the products lifecycle, the physical material and energy flow associated to human activities. All the lifecycle phasis have been taken into account: raw materials, manufacturing, transport, distribution, usage, end of life and recycling.

The PEP fits the ISO 14025, 14040 and 14044 expectations. It allows to anticipate the regulatory obligations and forms part of the eco-conception approach which Airwell wants to follow. Finally, building a POP allowed to calculate the environmental performance of some products.



General recommendations for installation of air/water heat pump

HYDRAULIC ACCESSORIES

■ **Disconnecter on water system**

Regulation needs to have a disconnecter type CA or BA installed with a power less than 70kW plugged on water system, depending on the heat transfer fluid.

■ **Safety valve**

The heat pump must be protected by a minimum of one safety valve. It must be installed in an accessible place, with a close proximity of the outlet line of the heat pump. No isolating valve must exist between the heat pump and safety valve.

Nota: A safety valve is also necessary on the buffer folume if equipped with a complementary electric heating.

■ **Safety thermostat on startup line of heating floor**

Installing a safety thermostat on startup line of heating floor is mandatory.

It must have a manual reset, mechanical, without electrical supply and independent from regulation.

It must cut the heating supply to avoid the temperature in the heating floor to exceed 55°C.

In case of a temperature exceeding 55°C it must stop the heat pump and electrical complement, as well as the circulator and close the three way regulation valve.

■ **Security group**

The domestic hot water tank must be supplied in cold water via a security group.

There must be no piping nor any element between the security group and the water tank.

■ **Expansion tank**

The expansion tank must be preferably upstream of the circulator.

■ **Air vent valve**

The installation must include an air vent sited on the highest poindoor of the circuit.

It's also recommended to install one on the buffer volume. The automatic air vent must be associated with an isolating valve.

■ **Dirt separator and filter sieve**

The installation of a dirt separator and filter sieve on upstream of the heat pump is highly recommended to protect it from molding and preserve an optimum thermal exchange.

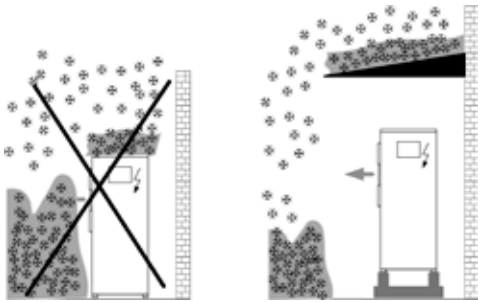
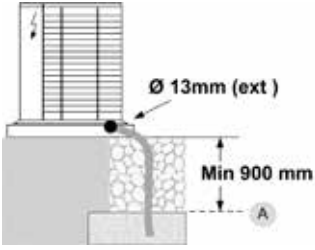
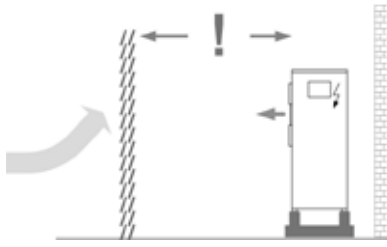

The filter sieve must of a diameter at least equal to the circuit diameter.

It's also recommended to install a drain valve on the bottom of the buffer volume to allow the evacuation of sediments.

■ **Manometers on circulators**

The manometer located on each circulator must be associated with two isolating valves. It allows to measure the pressure in the circulator and to evaluate the flow based on the specific curve of the circulator.

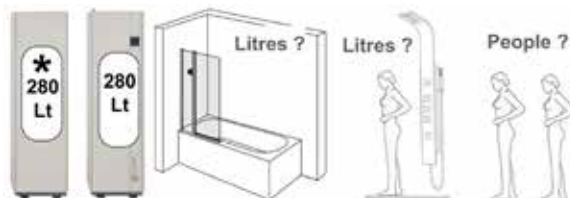
GENERAL RECOMMENDATIONS

| Snowdrifts | Condensate discharge |
|---|---|
|  <p>Provide a protection</p> |  <p>To avoid the water freezing downstream of the drain, lay the tube below the frost line (A).</p> |
| Strong winds | Water features |
|  <p>Provide windbreaks or similar</p> |  <p>< 15 °f. ? If necessary, install water softener</p> |

Domestic Hot Water Requirements

The requirements vary by the number of people living in the building

* Possibility of adding auxiliary cylinder in case of high hot water request



Estimated average daily per capita consumption of hot water

| Requirements | Liters - day - people (bathroom) | Liters - day - people (kitchen) |
|---------------|----------------------------------|---------------------------------|
| Low | Min.15 > max. 30 | Min. 10 > max. 20 |
| Medium | Min.30 > max. 60 | Min. 20 > max. 40 |
| High | Min.60 > max. 120 | Min. 40 > max. 80 |

Example: average requirement for 4 people need about 230 litres/day

Expansion tanks

Litres ? °C ?



Sizing expansion tanks according to the system features

Icons guide

HEATING RANGE



DC INVERTER

Compressor with high efficiency DC engine.



R410A FLUID

R410A refrigerant fluid.



R407C FLUID

R407C refrigerant fluid.



R134A FLUID

R134a refrigerant fluid.



ULTRA QUIET

Top design for the lowest sound level.



PROGRAMMABLE TIMER

Adjustable timer for power on and power off.



WEEK TIMER

Programmer defining a scenario that will be automatically executed by the device on a weekly basis.



REMOTE CONTROL LOCK

Locks the remote functions to avoid unexpected actions.



UNIT ON OUTPUT

Displays on the remote the power on or power off status of the unit.



HEATING MODE OPERATIONAL DOWN TO -20°C OUTDOORS

Heating mode available even at very low outdoor temperatures through special design of the unit.



HIGH TEMPERATURE UP TO 60°C

High temperature production up to 60°C.



HIGH TEMPERATURE UP TO 65°C

High temperature production up to 65°C.



DOMESTIC HOT WATER

Production of domestic hot water.



FLOOR HEATING

Connection available with a low-temperature emitter.



HIGH-TEMPERATURE RADIATOR

Connection available with a high-temperature emitter.



LOW-TEMPERATURE RADIATOR

Connection available with a low-temperature emitter.



BOILER REPLACEMENT

Replace an old, energy-consuming boiler with an efficient Airwell heat pump.



BOILER BACK-UP

Complement a boiler with a heat pump.



WATER PROGRAMS

The regulator maintains the power of the heat pump in accordance with a water logic based on outdoor temperature. Two water programs available and programmable.



BI-COMPRESSOR

Thermodynamic system comprising two compressors.



RENEWABLE ENERGY

The product is compatible with renewable energy standard.



CERTIFIED ELECTRICAL PERFORMANCE

The product's electrical performance is certified according to French standards (NF).



KEYMARK CERTIFICATION

The product is certified Keymark.



A series of horizontal dotted lines for writing, spaced evenly down the page.

A series of horizontal dotted lines for writing, spanning the width of the page.

Airwell

AIR CONDITIONING & HEATING

Our Aftersales Service

Export

Tel. ■ +33 (0)1 76 21 82 95

TECHNICAL SUPPORT:

e-mail ■ technical-spfr@airwell-res.com

Airwell
Residential

3, AVENUE DU CENTRE, LES QUADRANTS, BÂT. A - 78280 GUYANCOURT, FRANCE
TEL.: +33 (0)1 76 21 82 00 - FAX: +33 (0)1 76 21 82 01 - www.airwell-res.com