Austria Email

Hot water heat pump

WPA 300 PRO

A NEW DEFINITION OF

EFFICIENCY

Hot water heat pump

WPA 300 PRO

The WPA 300 PRO domestic hot water heat pump is easy to install and operate. It efficiently heats **300 liters of water** to up to 65 °C (COP(A20) 4.16) and operates reliably down to –10 °C. Thanks to its flexible air connections, **five installation variants** are possible. The WPA 300 PRO can use outdoor air, room air, or exhaust air from other devices.

ADVANTAGES

- Robust design, high efficiency, and user-friendly operation
- The 300-liter hot water tank with an enamelled surface and closed-cell PU high-performance insulation ensures extremely low heat loss
- Flexible installation options and configurations with or without air ducts
- Four positions for air inlet and outlet connections: 2× on top, 2× on the side
- Suitable for installation in rooms with a minimum ceiling height of 2.1 m
- With a structurally separated compressor compartment and an aerodynamically optimized interior, the WPA 300 PRO is one of the quietest units in its class
- Equipped with three sturdy leveling feet, allowing precise alignment on various surfaces and ensuring a stable, low-vibration stand
- A plug-and-play power cable (length 2000 mm) is included

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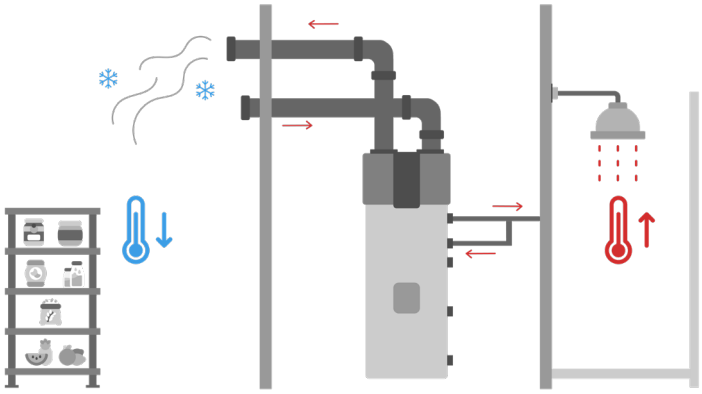
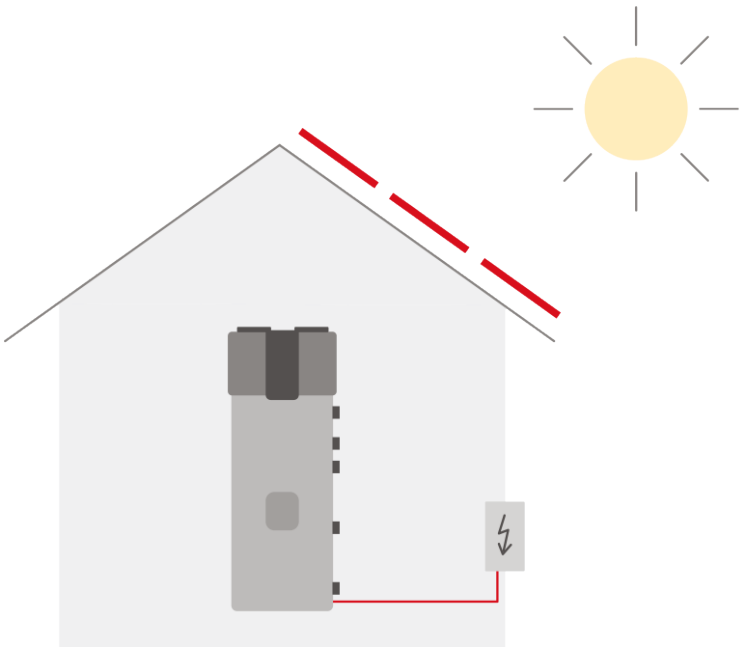
Outstanding efficiency:
With a COP of 4.16, the WPA 300 PRO generates more than four kilowatts of heat from just one kilowatt of electricity. This reduces energy consumption by up to 75% compared to conventional boilers — resulting in lower costs, reduced environmental impact, and long-term sustainable comfort.

The ideal solution for any home:
Thanks to its large storage tank and flexible planning options, the WPA 300 PRO is suitable for families, apartments, holiday homes, and any place where hot water is needed at all times. Salons, clinics, sports clubs, and other commercial spaces also benefit from its consistent water temperature and reliable performance.

Heats water and cools air:
While heating the water, the WPA 300 PRO extracts heat from the air and cools adjacent rooms such as storage areas, basements, or garages — without any additional energy consumption or control effort. Ideal for spaces where lower temperatures are desired.



Hot water storage with solar energy
If a solar system is available, the unit uses surplus electricity to heat domestic hot water. This further reduces costs and increases the energy self-sufficiency of the home or business.



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Simply set it up and enjoy peace of mind.
Once installed and configured, the hot water heat pump operates quietly and reliably, ensuring a constant supply of hot water. Operating costs are low and barely noticeable — just like the unit itself in everyday use.

Easy to use:
The WPA 300 PRO also impresses with its simple operation. It not only offers efficient control, but also numerous practical solutions for the end user.

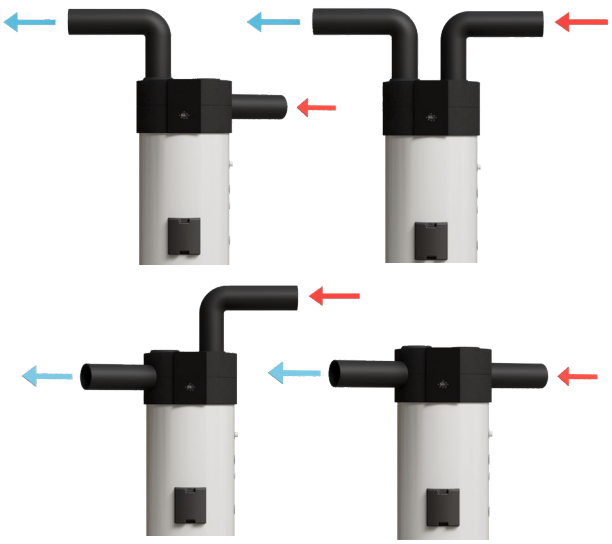
ADVANTAGES:

- Automatic switching between sources
- Operation of the pump in a special mod
- Ready for smart power grids
- Supports different tariffs and Smart Grid
- Calculates power consumption and costs
- BMS

Flexible air inlet and outlet system
The WPA 300 PRO features an adaptable inlet and outlet system that can be easily adjusted to the room layout and the unit's position. This simplifies installation and improves overall efficiency.

Room-air mode: The unit draws air from the same room and returns it there. The directed airflow ensures optimal circulation and prevents the mixing of supply and exhaust air.

Ducted mode: Air is drawn from one room and discharged into another. This allows adjacent areas such as storage rooms, basements, or garages to be additionally cooled.



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Technology

AFT™ - AirFlow Technology
The aerodynamic design minimizes air resistance, optimizes fan performance, reduces noise levels, and extends the service life of the unit.

SPF™ - Smart Placement Flexibility
Angled connectors and the modular design allow installation just 20 cm away from the wall, with a flexible supply and exhaust air system — ideal for basements and utility rooms.

MCS™ - MultiConnect System
Extensive connection options for additional heat sources (gas, oil, pellets, solar energy), BMS systems, and smart power grids.

SC™ - SmartCost
High efficiency and low power consumption, combined with flexible daily and weekly programming, allow you to achieve additional savings when using multi-tariff meters.

OHS™ - Optimal Hygiene System
A comprehensive protection system ensures the safe and long-lasting use of domestic hot water — an enamelled buffer tank, a double magnesium anode, and an external condenser prevent limescale buildup and bacterial growth.

EAS™ - Easy Access System
The practical top access, enabled by a thoughtfully designed cover, allows effortless maintenance — even in rooms with low ceilings.

AFA™ - AirFlow Adapt
The intelligent air-management system allows switching between indoor, outdoor, or exhaust-air operation, ensuring quiet and efficient airflow in every configuration.

NMS™ - Noise Management System
An advanced system featuring optimized airflow, effective insulation, and intelligent design ensures exceptionally quiet operation.

IHS™ - Insta Heat System
Rapid heating enabled by a built-in 1.5 kW electric heating element and a boost function that provides immediate availability of larger amounts of hot water at temperatures up to 75 °C.

Low GWP (Global Warming Potential of the Refrigerant)
The heat pump uses the environmentally friendly refrigerant R290 (GWP 0.02), ensuring minimal environmental impact.

Hot water heat pump WPA 300 PRO

Technical Data

	Unit	WPA 300 PRO
Article No		A 412 25
Capacity	L	290
Heat Source		Luft
Energy Efficiency Class for Indoor and Exhaust-Air Conditions		A++
Energy Efficiency Class for Outdoor-Air Conditions		A+
Defrosting		Active (Hot-Gas Defrost) and Passive (Air)
Air Duct Components	DN	160
Airflow Rate – Nominal (Indoor-Air Installation)	m^3/h	400
Airflow Rate – Nominal (Outdoor-Air Installation – Duct Connection)	m^3/h	400
Maximum Available External Pressure Loss – Nominal Airflow (Duct Connection)	Pa	207
Sound Power Level LW under Indoor-Air Conditions*	dB(A)	58
Sound Pressure Level under Indoor-Air Conditions (directivity factor Q = 2, distance 3 m)*	dB(A)	42
Rated Voltage	V/Hz	230/50
Maximum Operating Current	A	10,5
Rated Electrical Power Input	W	500**
Maximum Electrical Power Input	W	2170
Electrical Power of Immersion Heater	W	1500
Additional Pump (Circulation)	W	100
Circuit Breaker	A	16
Protection Class		IP X1
Communication		Connection to BMS Modbus RTU, RS-485
Dimensions (W×H×D)	mm	710x1813x740
Weight	kg	148
Refrigerant Type		R290
GWP (Global Warming Potential)		0,02
Refrigerant Charge	kg	0,148
Maximum Operating Pressure of Refrigerant System	MPa	3,1
Water Operating Range (Heat Pump Only)	°C	65
Water Operating Range (Heat Pump + Additional Electric Heater)	°C	75
Operating Range of Heat Pump (Air)	°C	-10 / +45
Maximum Permissible Operating Pressure in Heat Exchanger (at 110 °C)	MPa	1,0 (10 bar)
Heat Exchanger Volume	l	8
Heat Exchanger Surface Area	m^2	1,2
Maximum Operating Pressure of Domestic Hot-Water Tank	MPa	1,0 (10bar)
Standby Heat Losses According to EN 12897	kWh/Tag	2,08
Hot- and Cold-Water Connection	Zoll	G 1 / AG
Circulation Line Connection	Zoll	G ¾ / IG
Heat Exchanger Connection	Zoll	G 1 / IG
Condensate Drain (Ø)	mm	16

preliminary; ** maximum output (without electric immersion heater) at A20/W53

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Technical Data

Efficiency – Performance Data According to EN 16147 and Delegated Regulation (EU) 812/2013	Unit	WPA 300 PRO
Load Profile		XL
Performance Data for Operation with Indoor Air A20/W10-53.5 (air inlet and ambient temperature 20 °C) – average, colder, and warmer climate conditions		
Coefficient of Performance (COPdhw)		4,16
Heating-up Time	h/min.	8:45
Electrical Energy Consumption for Heating	kWh	3,38
Standby Power Consumption (Pes)	W	27
Maximum Volume of Mixed Water at 40 °C	l	393
Reference Hot-Water Temperature	°C	53,2
Energy Efficiency Class for Water Heating (ηwh)	%	172
Annual Electrical Energy Consumption (AEC)	kWh/year	975
Rated Heating Capacity	kW	1,57
Performance Data for Exhaust-Air Operation A20/W10-53.5 (exhaust-air and ambient temperature 20 °C) – average, colder, and warmer climate conditions		
Coefficient of Performance (COPdhw)		3,97
Heating-up Time	h/min.	9:08
Electrical Energy Consumption for Heating	kWh	3,48
Standby Power Consumption (Pes)	W	25
Maximum Volume of Mixed Water at 40 °C	l	399
Reference Hot-Water Temperature	°C	53,3
Energy Efficiency Class for Water Heating (ηwh)	%	163
Annual Electrical Energy Consumption (AEC)	kWh/Jahr	1025
Rated Heating Capacity	kW	1,52
Performance Data for Outdoor Air A7/W10-53.5 (air inlet 7 °C and ambient temperature 20 °C) – average climate conditions		
Coefficient of Performance (COPdhw)		3,61
Heating-up Time	h/min.	10:19
Electrical Energy Consumption for Heating	kWh	3,87
Standby Power Consumption (Pes)	W	28
Maximum Volume of Mixed Water at 40 °C	l	399
Reference Hot-Water Temperature	°C	53,3
Energy Efficiency Class for Water Heating (ηwh)	%	149
Annual Electrical Energy Consumption (AEC)	kWh/Jahr	1127
Rated Heating Capacity	kW	1,35

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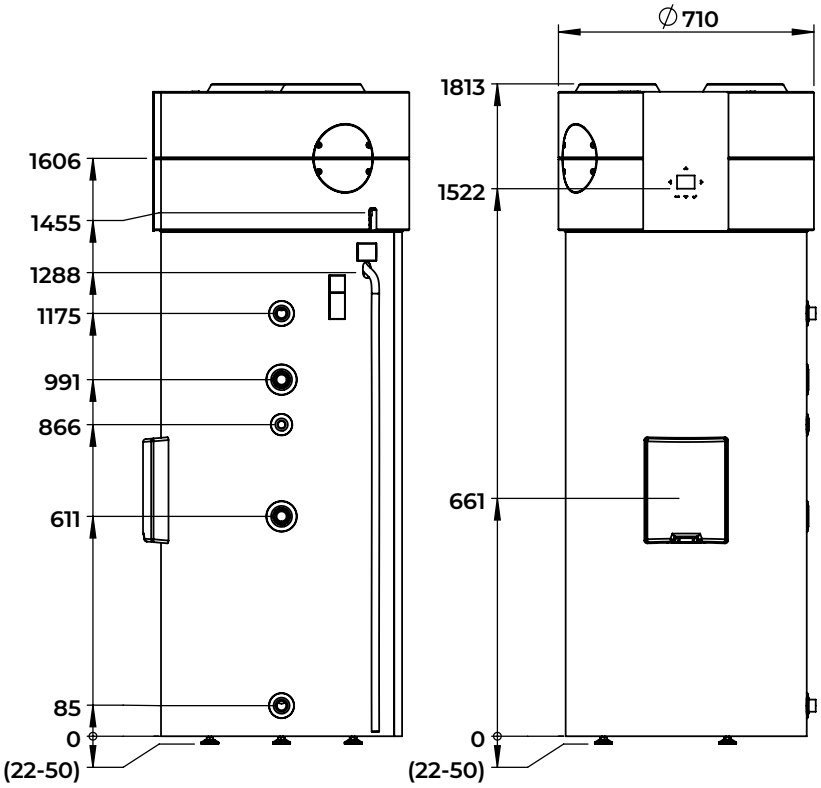
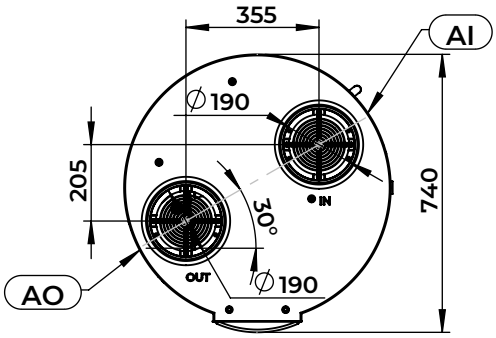
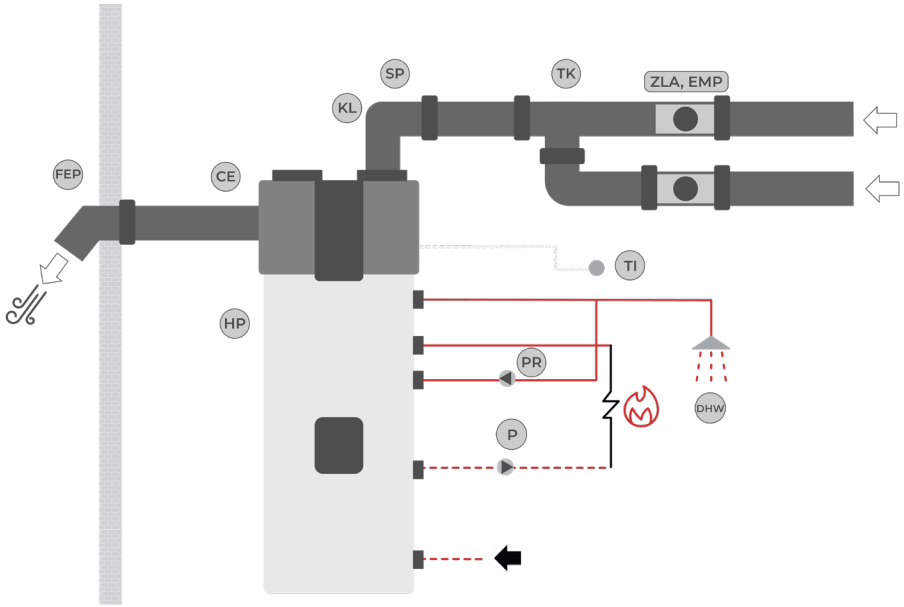




	Unit	WPA 300 PRO
Width	mm	710
Height	mm	1813
Depth	mm	740
Weight	kg	148

Switchable Airflow Configuration
The switchable airflow system of a domestic hot-water heat pump allows you to choose between indoor and outdoor air. This makes it possible to increase efficiency and actively influence the room climate — for example, by extracting warm air in summer or using waste heat in winter.

Legend: CE pipe; FEP façade element; HP heat pump; KL pipe bend; P circulation pump; PR circulation pump for domestic hot-water recirculation; SP ventilation pipe coupling; TI temperature sensor; TK T-piece; ZLA, EMP motorized shut-off damper



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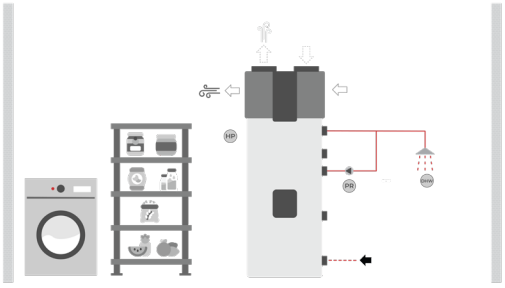
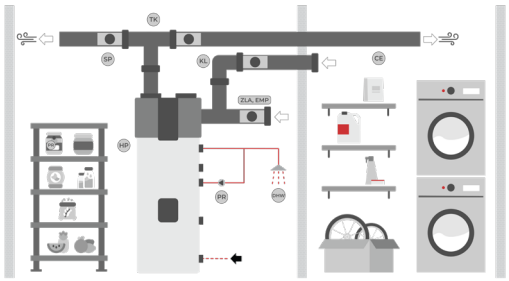
Installation Options

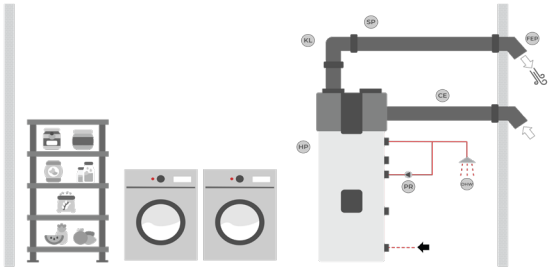
Room Installation:
The WPA 300 PRO uses heat from the ambient air while returning pleasantly cool and dehumidified air back into the room. This makes it an excellent solution when the heat pump is installed in a space that benefits from cooling and dehumidification (basement, storage room, etc.).



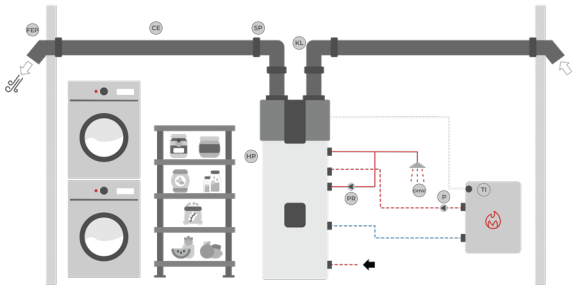
Air Source Switching:
The system allows flexible selection of the air source: air can be drawn from the same room, an adjacent room, from outdoors, or from a combination of these — depending on where cooling is desired.



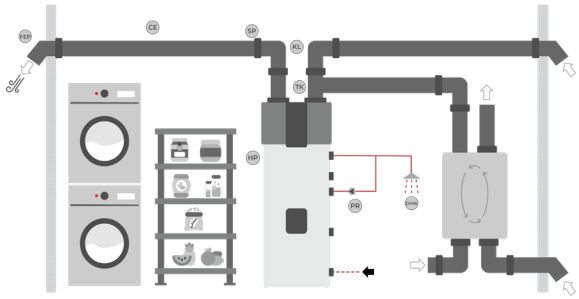
Ducted Installation:
The heat pump can be installed in one room while drawing and returning air through ducts from another room. This way, it does not affect the climate of the room in which the unit is installed.



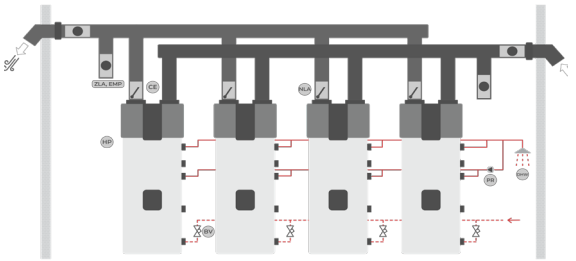
Connection to a Biomass Stove:
The WPA 300 PRO complements pellet, wood, or wood-chip heating systems. In summer, it provides hot water without unnecessary fuel consumption, while in winter it reduces fuel usage and increases comfort.



Exhaust Air from Heat Recovery:
The WPA 300 PRO converts heat that would otherwise escape through the ventilation system into energy for water heating, while cool air is returned to the outlet of the heat-recovery system.



Cascade Connection:
Multiple units can be connected in a cascade. They operate in harmony according to demand and ensure sufficient hot water even for larger buildings such as multi-family homes, sports facilities, or commercial properties.



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Head office: Austria Email AG,
Austriastraße 6, 8720 Knittelfeld
Tel. (03512) 700-0
E-Mail: office@austria-email.at
Internet: www.austria-email.at

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