



ECOAir Premium

AIR SOURCE
HEAT PUMPS

2-17 kW

HOW THE PICOENERGY HEAT PUMP WORKS

In principle, the heat pump works like a refrigerator: the same technique, only reversed utility. The heat pump receives energy from the heat source side (earth, water or air) at a low temperature and releases heat with a higher temperature on the heating side.



A heat pump uses solar energy stored in the air. This energy is available at any time, day or night, summer or winter. In the case of air source heat pumps, it is important, on the one hand, that they are designed for our latitudes (cold climate) in order to ensure maximum efficiency and, on the other hand, to ensure the lowest possible sound emission. Our heat pumps have been optimized for these criteria. The use of the PicoEnergy air source heat pump does not require any excavation work in your garden, only a little space for installation.

The most important advantages of the PicoEnergy air source heat pump at a glance:

- Can be combined with photovoltaic, solar or energy management
- Maximum efficiency through intelligent power control
- High quality - product quality from Austria
- Individual warranty packages

THE PHOTOVOLTAIC HEAT PUMP

The outstanding feature of the PicoEnergy air source heat pump is the efficiency and the forward-looking control technology. This results in exceptionally low operating costs compared to conventional heating systems and the possibility of heating, cooling, and hot water with this system. Even systems such as solar thermal, photovoltaic and house management systems work hand in hand with our intelligent heat pump control.



Thanks to the sophisticated PicoEnergy controller with TouchScreen, self-generated electricity from the photovoltaic system can be used for heating and cooling of the house.

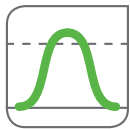
The speed control of the heat pump adapts itself to the photovoltaic power independently. The free photovoltaic electricity can thus be used as best as possible to heat the house, hot water and swimming pool.



Touch control
PicoEnergy Touch panel

ADVANTAGES

- Maximum self-consumption of free photovoltaic power
- High degree of comfort
- Long-term security of supply at the lowest cost
- Low maintenance
- Easy-to-use



INTELLIGENT POWER CONTROL

The PicoEnergy Power Inverter is a true innovation in the field of heat pump technology. The principle is very simple: The inverter adjusts the energy used to the actual needs of your home. The efficiency is thereby improved by approximately 20% and the life span of the compressor is prolonged due to significantly less switch-on cycles.



NEW INJECTION TECHNOLOGY

Due to the constantly changing parameters of an inverter heat pump, special attention must be paid to the overheating control. The absolutely new, model-based control is a product of years of experience. Proactive reactances are made to future speed changes and therefore the efficiency of the heat pump is maximized.



SMART GRID

PicoEnergy heat pumps are already "*Smart Grid Ready*" today. With this function, you can use the cost savings of future electricity networks. In times where generally less power is consumed, electricity is also cheaper. Therefore the operating time of the heat pump should be shifted to this period. This is fully automated by PicoEnergy's intelligent control system.



INTERNET INSIDE

All PicoEnergy heat pumps are already equipped with the future technology of "*Internet Inside*". This allows you as a customer to control your heat pump from your mobile phone, tablet or PC. If the heat pump is no longer working optimally, the heat pump automatically signals the problem to your selected heat pump installer. Via "*Internet Inside*", these adjustments can be made to the control settings, without having to be on site. This saves your time and money.



INTEGRATION OF EXTERNAL SYSTEMS

The integration of a photovoltaic system, solar system or house management system are possible thanks to the intelligent control of the PicoEnergy heat pump.

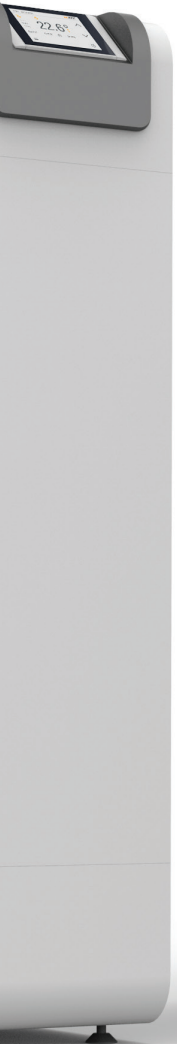
Photovoltaic integration can use the self-generated electricity for space heating as well as hot water preparation, preferably for own consumption. Feeding your own PV electricity to the grid will only occur when the hot water storage tank is charged and the house is comfortably warm.



TOP SYSTEM CONCEPT

The best heat pump is only as good as the designed system concept. PicoEnergy is always optimally oriented to this development!

This results in heating systems with maximum efficiency, which is permanently tested and confirmed by independent authorized testing institutes.

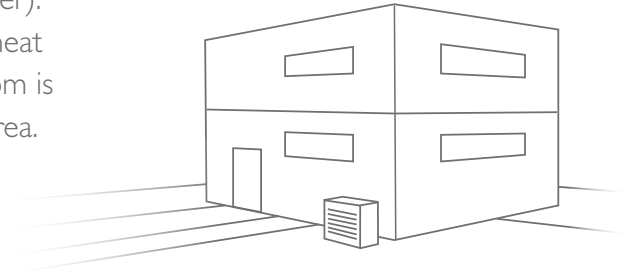


ADVANTAGES

- Intelligent power control
- Maximum efficiency of heat pump systems
- High innovative power also in the field of control technology
- Inverter technology
- Latest overheating control
- PV Self-consumption optimization
- Advanced "Smart Grid" functionality
- External systems can be integrated
- LAN interface in each heat pump
- Easy to use touch screen technology

ENERGY SOURCE AIR

Air source heat pumps obtain the energy for heating your house from the ambient air. These are mainly used when geothermal heat pumps are not possible or economically viable. The efficiency of an air source heat pump depends to a large extent on the ambient temperature (the higher, the better). With a PicoEnergy air source heat pump you can both heat and cool. Upon cooling, the heat extracted from the room is discharged to the ambient temperature in the outside area.



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INDIVIDUAL WARRANTY EXTENSIONS

Benefit from a specialist in geothermal energy with modern heat pump technology. PicoEnergy heat pumps are the product of over 35 years experience in heat pumps and a cooperation in the field of control technology with the global company KEBA.

Due to the high quality requirements, it is easy for us to offer extended warranties in addition to the guarantees.

It can be chosen between

3 years,

5 years or

10 years

Warranty-Extension

on all materials. *

PICO ENERGY

HEAT PUMP

CERTIFICATE

- 3 Years Warranty-Extension
- 5 Years Warranty-Extension
- 10 Years Warranty-Extension

Type:

Warranty Period:

To:

Address:

ZIP/City:

[Signature]
Managing Director
PicoEnergy GmbH & Co KG

* Prices according to valid PicoEnergy price list and valid warranty conditions

Technical Specifications

	Air/Water-Heat Pumps		
	Models	WPL412	WPL618
Power range [kW]		2-12 kW	4-17 kW
Energy Class VL35 °C		A++ (*A+++)	A++ (*A+++)
Energy Class VL55 °C		A++	A++
Dimensions Heat pompe H x W x D [mm]		1300 x 600 x 650	
Weight [kg]		160	166
Dimensions Evaporator H x W x D [mm]		1055x1088x790	1330x1275x810
Weight Evaporator [kg]		145	180
Refrigerant		R410A	
Sound power level Heat Pump acc. EN12102 [dB(A)]		44,5	44,6
Sound power level Evaporator acc. EN12102 [dB(A)]		57,9	57,1
Fuse main current [A]		3 x C16	
Fuse controller [A]		1 x C13	
Hydraulic connection [inch]		1" External thread	
Max. Flow temperature [°C]		up to 62°C	

PERFORMANCE DATA ACCORDING EN 14825

Climate: average (Ambient temperature = 2°C)	SCOP 35 °C	4,59	4,55
	η s 35 °C [%]	180	179
	SCOP 55 °C	3,66	3,59
	η s 55 °C [%]	143	141

PERFORMANCE DATA TO EN 14511

A7/W27 at 26% Heating output	Heating output [kW]	3,46	5,75
	Power consumption [kW]	0,60	0,92
	Coeff. of perf. [COP]	5,75	5,66
A2/W35 at 52% Heating output	Heating output [kW]	5,93	8,98
	Power consumption [kW]	1,50	2,29
	Coeff. of perf. [COP]	3,96	3,91
A2/W35-5K at 100% Heating output	Heating output [kW]	11,82	17,23
	Power consumption [kW]	3,14	4,68
	Coeff. of perf. [COP]	3,76	3,68
A-10/W35 at 100% Heating output	Heating output [kW]	8,62	13,09
	Power consumption [kW]	3,05	4,69
	Coeff. of perf. [COP]	2,83	2,79
A7/W55 - 8K at 40% Heating output	Heating output [kW]	5,23	7,92
	Power consumption [kW]	1,72	2,64
	Coeff. of perf. [COP]	3,03	2,99
A-7/W52 at 100% Heating output	Heating output [kW]	8,77	13,25
	Power consumption [kW]	3,77	5,75
	Coeff. of perf. [COP]	2,33	2,30
A2/W42 at 47% Heating output	Heating output [kW]	5,64	8,53
	Power consumption [kW]	1,55	2,38
	Coeff. of perf. [COP]	3,63	3,59
Minimum power output A2/W35	Heating output [kW]	1,60	3,33
Minimum power output A2/W55	Heating output [kW]	3,81	5,88

THE NEW GENERATION



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