PICO ENERGY

ECOAir Compact

AIR SOURCE HEAT PUMPS

2-17 kW

YOUR ENERGY OF TOMORROW WELL MANAGED

PICOENERGY PRODUCTPORTFOLIO

An intelligent complete system of energy production, storage and consumption will reduce electricity costs in the long term. This brings more living comfort with more efficient use of energy. Other benefits of PicoEnergy are:

- Can be combined with photovoltaic, solar or e.g. Energy Management (Smart1, Loxone)
- Maximum efficiency through intelligent
- power control
- High quality - product from Upper Austria
- Individual warranty packages
- Developed and produced in Austria

PicoEnergy Technology

HEATING COOLING

DR. HANNES F. JAKOB, MBA

MANAGING DIRECTOR PICOENERGY GMBH & CO KG

„Our exclusive partners throughout Europe appreciate the excellent quality from Austria and the high efficiency of our products, as well as our support and online service - ensuring a perfect installation and commissioning and a smooth operation for our customers.“

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 PHOTOVOLTAIC AIR SOURCE HEAT PUMP

The outstanding feature of the PicoEnergy heat pump is its efficiency and future-oriented control technology. This results in compared to conventional heating systems exceptionally low operating costs and the ability to prepare with this system for both heating, cooling, and hot water. Even systems such as solar thermal, photovoltaic and house management systems work hand in hand with our heat pump control.

Touch control
PicoEnergy Touch panel AP420

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

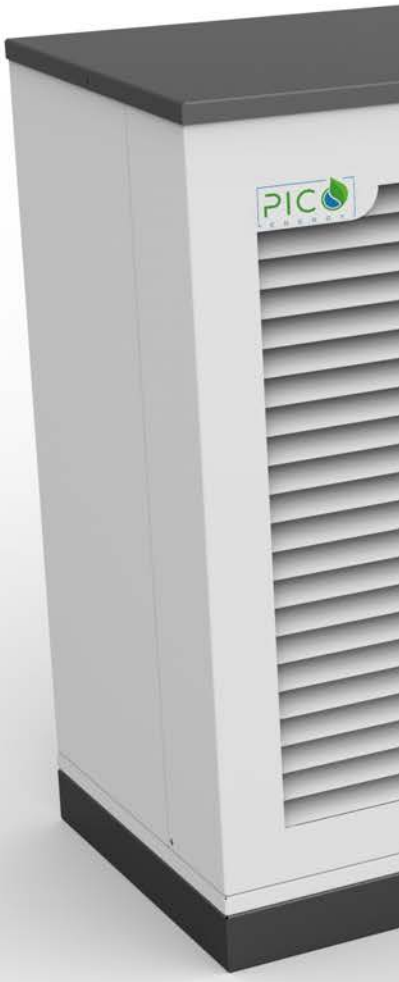
Thanks to the sophisticated PicoEnergy controller with TouchScreen, self-generated electricity from the photovoltaic system can be used for heating and cooling of the house. The speed control of the heat pump adapts itself to the photovoltaic power independently. The free photovoltaic electricity can thus be used as best as possible to heat the house, hot water and swimming pool.

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.

NEW
REFRIGERANT
R452B

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

HOW TO SIMPLY AND EFFICIENT-LY INTERCONNECT YOUR LIFE

Due to "Internet Inside" PicoEnergy heat pumps have been able to use current developments for some years. The advantages of digital networking are obvious. Maintenance and error
Diagnosis can be carried out quickly and easily via full remote control. Travel costs and time are eliminated.
You can also control your heating system from anywhere in the world:
Whether smartphone, tablet or voice control - use all the possibilities to manage your room temperatures.

Whether touch operation, PicoEnergy control or control via smartphone - networked technology makes your heat pump versatile:

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 standards,
it is easy for us to offer extended warranties.

It can be chosen between

3, 5 or 10 years Warranty-Extension

on all Materials. *

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

Technical Specifications	Air/Water-Heat Pumps		
	Models	WPLC 412	WPLC 618
Power Range [kW]		2-12 kW	4-17 kW
Energy Class VL35 °C		A++ (*A+++)	A++ (*A+++)
Energy Class VL55 °C		A++	A++
Dimensions H x W x D [mm]		1040 x 1560 x 560	1205 x 1745 x 628
Weight [kg]		220	267
Refrigerant		R452b	
Sound power level acc. EN12102 [dB(A)]		45.0	47.0
Sound level add. for low-frequency noise characteristics Lz [dB]		0	
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	4,95	4,92
	η s 35 °C [%]	195	194
	SCOP 55 °C	3,82	3,78
	η s 55 °C [%]	150	148
PERFORMANCE DATA ACCORDING EN14511			
A7/W35 at 33% Heating output	Heating output [kW]	4,78	7,16
	Power consumption [kW]	0,92	1,43
	Coeff. of perf. [COP]	5,18	4,99
A7/W55 - 8K at 40% Heating output	Heating output [kW]	5,41	8,09
	Power consumption [kW]	1,69	2,64
	Coeff. of perf. [COP]	3,20	3,07
A2/W35 at 52% Heating output	Heating output [kW]	6,56	8,95
	Power consumption [kW]	1,44	2,08
	Coeff. of perf. [COP]	4,56	4,31
A2/W35 at 100% Heating output	Heating output [kW]	11,79	17,18
	Power consumption [kW]	3,07	4,58
	Coeff. of perf. [COP]	3,84	3,75
A-7/W35 at 88% Heating output	Heating output [kW]	8,02	14,01
	Power consumption [kW]	2,48	3,84
	Coeff. of perf. [COP]	3,24	3,13
A-7/W52 at 100% Heating output	Heating output [kW]	8,96	13,42
	Power consumption [kW]	3,66	5,69
	Coeff. of perf. [COP]	2,45	2,30
A-10/W35 at 100% Heating output	Heating output [kW]	8,23	12,21
	Power consumption [kW]	2,63	4,04
	Coeff. of perf. [COP]	3,12	3,02
Minimum power output A2/W35	Heating output [kW]	3,50	6,50
Minimum power output A2/W55	Heating output [kW]	6,00	9,00

PICO ENERGY

THE NEW GENERATION

Distribution Partner

Please request our current brochures without obligation:

Brochure URBANECO
Heat pump, 2-6 kW

Brochure RURALECO
Heat pump, 4-18 kW

Brochure ECOAIR
Heat pump, 4-34kW

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