



Air source heat pump in monobloc design

For large properties and apartment buildings as well as commercial applications

VITOCAL 250-A PRO



Utilising outside air quietly and efficiently for heating, cooling and DHW.

For large properties and apartment buildings as well as commercial applications



Vitocal 250-A PRO air source heat pump for an apartment building

The Vitocal 250-A PRO compact air source heat pump provides heating, cooling and hot water. For this purpose, the sound-insulated outdoor unit quietly and efficiently uses the outdoor air as a heat source. A scroll compressor with variable output adjustment and electronic expansion valves ensure a flow temperature of up to 70 °C with very high efficiency, leading to low consumption costs.

High output through cascade arrangement

With variable output adjustment, the Vitocal 250-A PRO is a heating and cooling solution that can be tailored to individual project requirements in larger residential and commercial buildings and businesses. One appliance generates up to 39.5 kW of heating output. A cascade arrangement with up to four appliances is designed to accommodate larger outputs. Only one indoor unit is required for this.

Impressive indoor unit with many advantages

The indoor unit of the Vitocal 250-A PRO has many different control functions. Up to three heating / cooling circuits can be controlled with a heating buffer.

Hot water can be produced using a cylinder loading system with external plate heat exchanger. Alternatively a Vitotrans 353 freshwater module can be used to produce DHW. If required an external heat generator can be integrated to cover the peak load.

The integration of the Vitocal 250-A PRO into the building management system (BMS) is a further advantage. This enables the heat pump and the hydraulic system to be monitored and controlled from a central control centre. All essential values can be checked and adjusted from anywhere via a standard BACnet/IP or Modbus TCP/IP connection. Alternatively, hardware contacts are available for external control.

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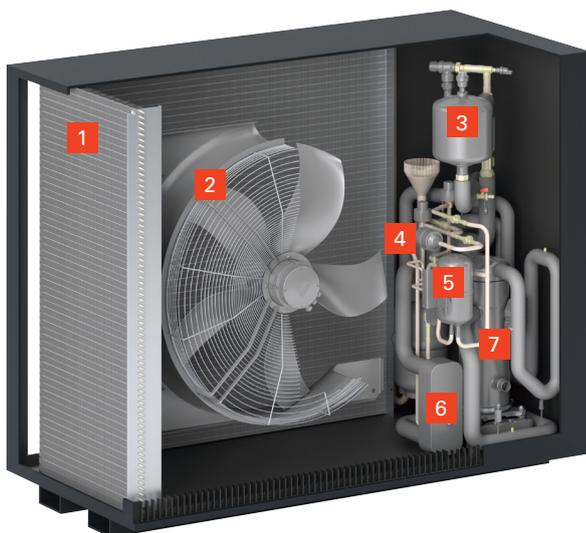
Heating output: 39.5 kW

Cooling capacity: 26.0 kW



VITOCAL 250-A PRO

- 1 Vitocal 250-A PRO outdoor units
- 2 Charging station for electric car
- 3 Vitocell heating water buffer cylinder
- 4 Vitocell DHW cylinder
- 5 Vitotrans 353 freshwater module
- 6 Vitocal 250-A PRO indoor unit
- 7 Vitocharge VX3 inverters
- 8 Vitovolt 300 photovoltaic system



VITOCAL 250-A PRO

- 1 Coated evaporator with corrugated fins for higher efficiency
- 2 Power saving, variable speed axial fan
- 3 Refrigerant float valve
- 4 Filter dryer
- 5 Refrigerant receiver
- 6 Heat exchanger
- 7 Variable speed scroll compressor

Benefits of the Vitocal 250-A PRO

- + Heating, cooling and DHW with a single appliance
- + Dual mode operation with an existing heat generator
- + Through cascade arrangement, an output demand of up to 158 kW can be covered with only one indoor unit (4 x 39.5 kW)
- + Suitable for modernisation projects due to 70 °C flow temperature (available: mid 2025)
- + Demand-oriented output adjustment through electronic expansion valves
- + Use of the natural refrigerant R290
- + Compact dimensions for space saving outdoor installation
- + Installation possible in densely populated areas thanks to low sound emissions
- + Weatherproof casing with multilayer coating
- + Factory pre-installation including switching, control and safety equipment
- + Connection to building management system via integrated Modbus TCP/IP and BACnet/IP interface
- + Easy to service thanks to good accessibility
- + Online system monitoring
- + Attractive subsidy
- + Three phase power supply

Air source heat pump **VITOCAL 250-A PRO**

Vitocal 250-A PRO	Type	AWO-AC-AF 251.A40
Heating performance data to EN 14511 (A7/W35)	kW	39.5
Cooling performance data to EN 14511 (W7/A35)	kW	26.0
Refrigerant circuit		
– Number of compressors		1
– Number of refrigerant circuits		1
– Refrigerant mass		R290
– Charge weight	kg	3.3
– Global warming potential (GWP100 as per IPCC AR6)		0.02
– CO ₂ equivalent	kg	0.06
Maximum flow temperature (down to -2 °C)	°C	70
Power supply	3/N/PE	400 V/50 Hz
Sound power of outdoor unit at rated heating output (tested with reference to EN 12102/EN ISO 3744) Assessed total sound power level at A7/W55		
– ErP	dB(A)	58.2
– Maximum	dB(A)	69.8
– Low-noise mode	dB(A)	60.9
Weight	kg	550
Dimensions		
Length	mm	1900
Width	mm	940
Height	mm	1570

* As per Energy Label 811/2013

Product features

- Air source heat pump in monobloc design
- For mono mode or dual mode operation
- Also as a cascade solution for a higher output
- Heating and cooling with a single appliance (active cooling in summer)



Indoor unit



Outdoor unit

Your trade partner

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