Jifon AirGo™

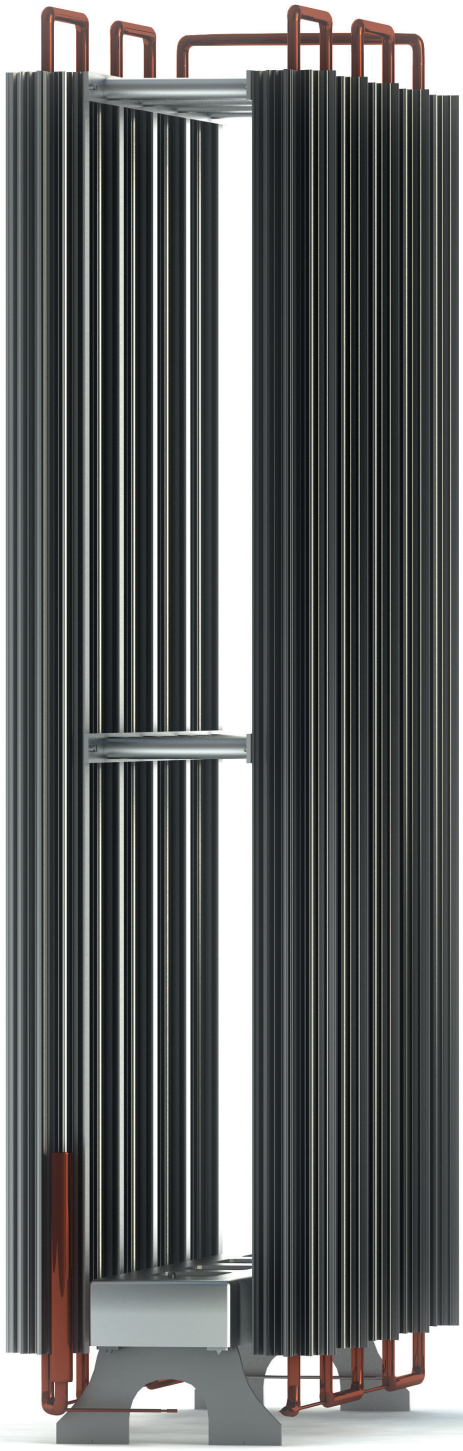
A hybrid heat pump

Smart fan-less heat pump

The Jifon AirGo™ heat pump combines a 30-meter copper coil buried in the ground with our fan-less air-collector. This design embodies a hybrid solution, where energy is always drawn from the air and, when temperatures fall below freezing, is also extracted from the ground.

The fan-less air-collector requires no defrosting, which gives an economical operation and a high rate of energy exchange. The simple design results in many attractive advantages, including low maintenance, long life, and easy installation in many locations.

The supplement heat source allows the Jifon AirGo™ heat pump to operate down to -20° C, overcoming typical limitations of air-to-water heat pumps. Our intelligent control approach allows you to use your pre-existing heating system as a supplement. You can save up to 80% of your heating consumption.



Operation

The Jifon AirGo™ heat pump draws energy from the air with our fan-less air-collector. The air-collector should be placed where it is most exposed to wind, rain and sun. On the coldest days, the AirGo™ also uses a 30 meter copper loop to extract energy from the ground. This combination of two sources of energy is Jifon's smart hybrid solution.

Its well-thought-out design makes the Jifon AirGo™ a very simple and cost-effective device to install. It even fits in small areas.

Between the air-collector and the GreenBox™ heat pump module, at about 100-150 cm depth a copper loop is laid down in the ground, depending on geographic zone.

The JiControl™ manages the heat pump and its supplementary heat source. Using an indoor sensor, it ensures that a uniform temperature is maintained.

The Jifon AirGo™ Refrigerant Loop Made Simple

1. The refrigerant flows through the AirGo™ air-collector, where it picks up energy from the air, and is then transported via a ground loop* to the GreenBox™ heat pump module, at which point the refrigerant is in a gaseous form.
2. The compressor compresses the warm refrigerant, increasing in temperature significantly.
3. The high temperature of the compressed refrigerant is transferred, via the heat exchanger, to the building's hydronic heating system.
4. The cooler refrigerant, its pressure lower, is pumped back to the AirGo™ air-collector, and the process starts all over again.

*The ground loop provides the heat pump with a "boost" on colder days, when the refrigerant picks up energy stored in the ground as well. In other words, the energy that the AirGo™ air-collector cannot extract from the cold air is picked up by the supplementary ground loop.

Advantages

- A unique fan-less air-collector
- Defrosting is done by nature
- Reliable construction
- Only one moving part: the compressor
- Smart temperature control by JiControl™
- Taking into account the building's heating requirements
- Save up to 80% of heating consumption

Technical data Jifon AirGo™

Model AirGo™	Unit	11kW	15kW	20kW
Electrical connection		400 V, N3-phases		
Fuse	A	16D	16D	25D
Compressor, type		Scroll		
Compressor, input maximum	kW	4,26	5,66	8,47
Compressor, displacement	m^3/h	14,09	19,30	28,26
Maximum watertemperature	°C	55		
Refrigerant R407c	kg	~2	~4	~5
Cut-off pressure min/max R407c	bar	0,5/31		
AirGo air-collector	pcs	1	2	3
Dimensions AirGo air-collector (HxWxD)	mm	2250x500x1160		
Dimensions GreenBox (HxWxD)	mm	730x590x500		
Weight GreenBox	kg	95	102	127
JiControl control panel	size	16	16	25
Previous heat demand with oil*	m^3	3,5 - 4,7	5,8 - 7,0	8,2 - 9,4
Previous heat demand with electricity	kWh	30.000 - 40.000	50.000 - 60.000	70.000 - 80.000
Heat demand with Jifon AirGo**	kWh	7.500 - 16.000	12.500 - 24.000	17.500 - 32.000

*85% efficiency | **The values given are only a rough guideline

- A Swedish Quality Product -

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