## Technical Data "G-3001/G-5001"





"G-3001 /G-5001"

Is a geothermal energy generator, which heats the intake air in winter and cools it in summer and it is especially used as frost protection component of a ventilation unit. The brine in a brine-driven geothermal heat collector absorbs the soil's temperature and converts it to the intake air (inside the heat exchanger of the unit).

The unit is equipped with G4 filter what will protect unit against contamination.

The unit has to be connected to the circulation pump (by customer), safety group (by customer) and control (by customer). Units can be used in 2 versions "R" and version "L". Version "R" – Right version means that airflow to the ventilation unit goes to the right hand side. "L" version – airflow to the left hand side. Filter has to be placed accordingly.

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G-3001 G-5001

Weight	11 kg	13 kg		
Housing dimensions (L x W x H)	590 x390 x 530 mm	590 x390 x 530 mm		
Inlet and Outlet air duct connection	DN 250	DN 250		
Operating range outdoor temperature	-30 °C to 60 °C	-30 °C to 60 °C		
Heating capacity	2750 W	5200 W		
Cooling capacity	3010 W	5520 W		
Energy consumption (depending on circulation pump)	40 W	50W		
COP (heating /cooling)	68.75 / 75.25	104 / 110.40		
Pressure drop Pa	13 Pa at 300m3/h	13 Pa at 300m3/h		
Optimum brine pressure	1,5 bar	1,5 bar		
Brine Flow	550 l/h	1300 l/h		
Brine temperature (winter/summer)	+6 °C / +12 °C	+6 °C / +12 °C		
Brine mixture	ethylene glycol-water mixture	ethylene glycol-water mix- ture		
Brine connection	3/4 inch external thread	3/4 inch external thread		
Condensate drain connection	D40 external thread	D40 external thread		

## Recommendation for geothermal heat collector

Collector pipe	32/26.2 PE (or PE-RC)	32/26.2 PE (or PE-RC)		
Pipe length (depending on soil type)	līdz 300 m	virs 300 m		
Capacity per 10 m	5,5l	5,5l		

	Values		in / out glycol +6/+2oC (heating)			in/ out glycol +12/+16oC (cooling) Outside temp. +30 oC		
Units	Air flow Inlet air temp		Outlet air temp	Output	Fluid flow	Outlet air temp	Output	Fluid flow
	m³/h	°C	°C	kW	l/s	°C	kW	l/s
G-3000/G-3001	300	-22	1.36	2.75	0.152	16.5	3.01	0.152
G-5000/G-5001	600	-22	0.07	5.2	0.36	17.4	5.52	0.36

