Technical Data
“G-3000/G-5000”

“G-3000 /G-5000”

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 as a whole (heat exchanger with “A” class circulation pumps and safety unit in an insulated EPP housing) is activated by the temperature controlled switch of the brine pump. G4 filter is integrated into the unit, front and top door ensures easy access and maintenance.

Unit is designed o be used as LEFT and RIGHT versions, that can be achieved by changing position of the filter. By changing versions of the unit and direction of the airflow there are minor heating and cooling changes possible.

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Technical Data
“G-3000/G-5000”

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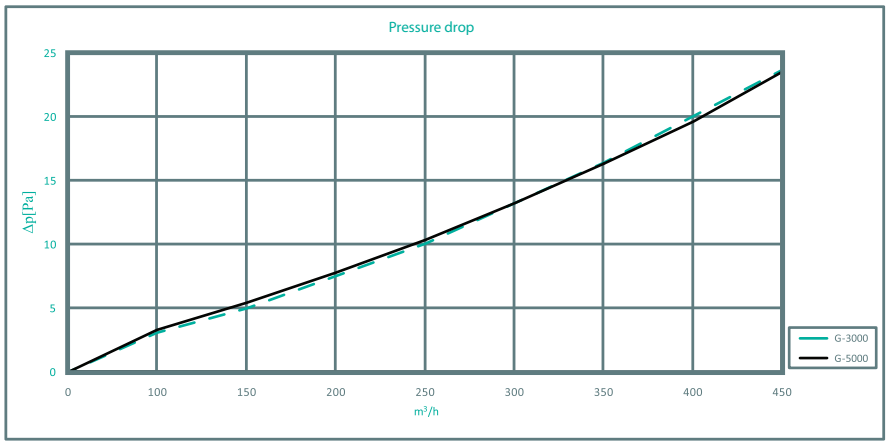
GEOTHERMAL TECHNOLOGIES

	G-3000	G-5000
Weight	18 kg	23 kg
Housing dimensions (L x W x H)	590 x390 x 720 mm	590 x390 x 720 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 mixture
Brine connection	¾ inch external thread	¾ 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

Units	Values		in / out glycol +6/+2oC (heating)			in/ out glycol +12/+16oC (cooling) Outside temp. +30 oC		
	Air flow	Inlet air temp	Outlet air temp	Output	Fluid flow	Outlet air temp	Output	Fluid flow
	m^3/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



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