

ecoGEO+ B/C 3-12

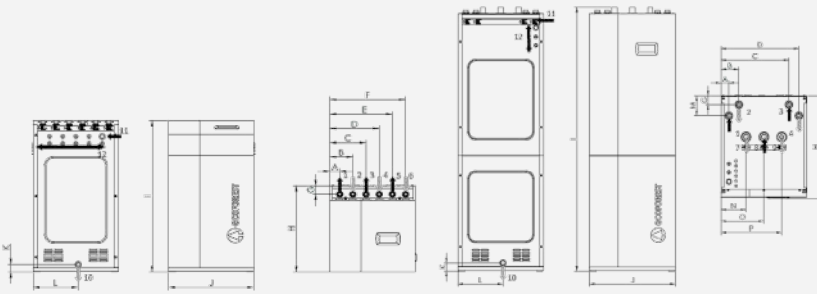
- Modulating thermal power control within a wide range (20-100%) and modulating flow rate control of both brine and production circuits (20-100%).
- Inverter technology and scroll compressor.
- Compact design including brine and production circulation pumps, brine and production expansion vessels (8l and 12l respectively), brine and production safety valves and DHW three-way valve.
- High Temperature Recovery system (HTR) for DHW production up to 70 °C without electrical support and simultaneous production of DHW and heating/cooling.
- Integrated management of up to 4 different emission temperatures, 2 buffer tanks (heating and cooling), 1 DHW tank, 1 pool and hourly control of DHW recirculation.
- Integrated management of aerothermal collection modulating units, in case of air source or hybrid configurations.
- Integrated management of external On/Off or modulating auxiliary systems, such as electrical heaters, On/Off boilers or modulating boilers.
- Integrated management of cascade systems up to 3 units.
- Integrated management of simultaneous cooling/heating systems according to scheme.
- Integrated free cooling in models 2 and 4.
- Integrated active cooling in models 3 and 4.
- Single-phase and Three-phase versions available.
- Integrated photovoltaic hybridisation.
- Integrated energy meters to measure the electrical consumption, the heating/cooling thermal power, the COP and the monthly and annual SPF.

SPECIFICATIONS ecoGEO+ B/C 3-12		UNITS	B1/C1	B2/C2	B3/C3	B4/C4	
APPLICATION	Place of installation	-	Indoors				
	Type of brine system ¹	-	Ground source / Air source / Hybrid source				
	DHW, Heating and Pool	-	✓	✓	✓	✓	
	High Temperature Recovery (HTR) system option	-	✓	✓	✓ by default	✓ by default	
	Integrated Active cooling	-	-	-	✓	✓	
PERFORMANCE	Integrated Passive cooling	-	-	✓	-	✓	
	Modulation range of the compressor	%	20 to 100				
	Heating power output ² , B0W35	kW	2,5 to 16,0				
	COP ² , B0W35	-	4,6				
	Active cooling power output ² , B35W7	kW	-	3,1 to 15,0			
	EER ² , B35W7	-	-	5,2			
	Max. DHW temperature without / with support ⁵	°C	63 / 70				
	Noise power emission level ⁶	db	34 to 45				
	Energy label / rjs / SCOP W35 average climate control	-	A+++ / 194% / 5,05				
	Energy label / rjs / SCOP W55 average climate control	-	A++ / 142% / 3,75				
OPERATION LIMITS	Distribution / Set heating outlet temperature range	°C	10 to 60 / 20 to 60				
	Distribution / Set cooling outlet temperature range	°C	4 to 35 / 7 to 25				
	Brine inlet temperature range in heating applications	°C	-25 to 35				
	Brine inlet temperature range in cooling applications	°C	10 to 60				
	Minimum / Maximum refrigerant circuit pressure	bar	2 / 45				
	Production / Pre-load circuit pressure	bar	0,5 to 3,0 / 1,5				
	Brine / Pre-load circuit pressure	bar	0,5 to 3,0 / 0,7				
	Volume / Max. DHW storage tank pressure (ecoGEO+ C)	l / bar	165 / 8				
WORKING FLUIDS	R410A Refrigerant load without HTR / with HTR	kg	0,9 / 1,0		1,0		
	Compressor oil type / load	kg	POE / 0,74				
CONTROL ELECTRICAL DATA	1/N/PE 230 V / 50-60 Hz ⁸	-	✓				
	Maximum recommended external protection ⁹	-	C16A				
	Transformer primary circuit fuse	A	0,5				
ELECTRICAL DATA: SINGLE-PHASE	Transformer secondary circuit fuse	A	2,5				
	1/N/PE 230 V / 50-60 Hz ⁸	-	✓				
	Maximum recommended external protection ⁹	-	C32A				
	Maximum consumption ² , B0W35	kW / A	4,2 / 18,6				
	Maximum consumption ² , B0W55	kW / A	5,0 / 21,7				
	Minimum / Maximum starting current ⁷	A	2,0 / 8,0				
ELECTRICAL DATA: THREE-PHASE	Correction of cosine Ø	-	0,96/1				
	3/N/PE 400 V / 50-60Hz ⁸	-	✓				
	Maximum recommended external protection ⁹	-	C16A				
	Maximum consumption ² , B0W35	kW / A	4,2 / 6,2				
	Maximum consumption ² , B0W55	kW / A	5,0 / 7,2				
	Minimum / Maximum starting current ⁷	A	0,7 / 2,6				
DIMENSIONS/WEIGHT	Correction of cosine Ø	-	0,96/1				
	Height x width x depth	mm	ecoGEO+ B: 1060x600x710 · ecoGEO+ C: 1804x600x720				
	Empty weight (without assembly)	kg	B 185 · C 246	B 193 · C 254	B 185 · C 246	B 193 · C 254	

- Air source/Hybrid source by replacing/combining the ground source circuit by/with one or more ecoGEO+ AU. Consult the ecoGEO+ AU manual for more detailed information.
- In compliance with EN 14511, this includes the consumption of the circulation pumps and the compressor driver.
- Considering brine and production flow rates in compliance with EN 14511.
- Considering a heat slope from 20°C to 50°C in absence of consumption.
- Considering support provided by the emergency electrical heater or the HTR system. Maximum DHW temperature with the HTR system can be limited by the compressor discharge temperature.
- In compliance with EN 12102, this includes the acoustic insulation kit of the compressor.
- Starting current depends on the working conditions of the hydraulic circuits.
- The admissible voltage range for proper operation of the heat pump is ±10%.
- Maximum consumption can vary significantly according to working conditions, or if the compressor's operation range is restricted. Consult the technical service manual for more detailed information.
- Certification in process.

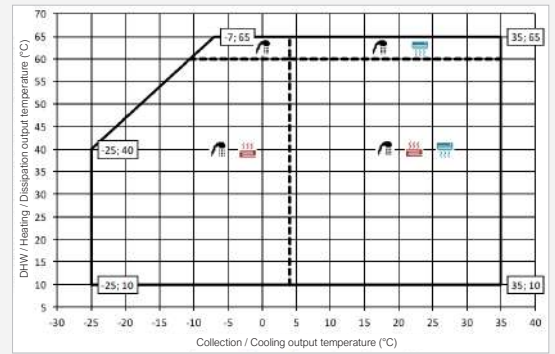
Dimensions and hydraulic connections

Operational chart

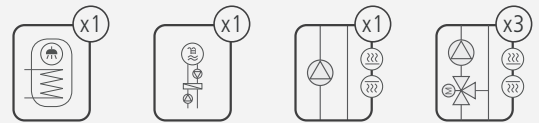


MODEL	DIMENSIONS (mm)															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
ecoGEO+ Basic	55	153	251	349	447	545	70	710	1058	600	61	300	-	-	-	-
ecoGEO+ Compact	55	125	475	545	-	-	62	720	1851	600	58	315	140	175	300	425

1. Heating/Cooling Outlet - 1 1/4" M
2. Heating/Cooling Inlet - 1 1/4" M
3. Brine Outlet - 1 1/4" M
4. Brine Inlet - 1 1/4" M
5. DHW System Outlet - 1 1/4" M
6. DHW System Inlet - 1 1/4" M
7. DCW Inlet - 1" F
8. DHW Outlet - 1" F
9. DHW Recirculation Inlet - 3/4" F
10. Drain - 16 mm



Installation management



Performance curves

