

ecoGEO+ B/C 5-22

- Modulating thermal power control within a wide range (15-100%) 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.

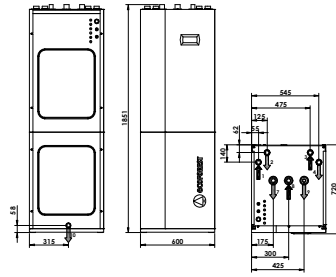
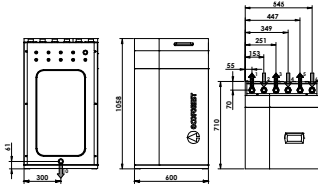
SPECIFICATIONS ecoGEO+ B/C 5-22		UNITS	B1/C1	B2/C2	B3/C3	B4/C4
APPLICATION	Place of installation	-	Indoors			
	Type of brine system ¹	-	Ground source / Air source / Hybrid source			
	DHW, Heating and Pool	-	✓	✓	✓	✓
	High Temperature Recovery (HTR) system option	-	✓	✓	✓ by default	✓ by default
	Integrated Active cooling	-	-	-	✓	✓
	Integrated Passive cooling	-	-	✓	-	✓
PERFORMANCE	Modulation range of the compressor	%	15 to 100			
	Heating power output ² , B0W35	kW	4,0 to 22,8			
	COP ² , B0W35	-	4,9			
	Active cooling power output ² , B35W7	kW	-	4,2 to 22,0		
	EER ² , B35W7	-	-	5,3		
	Max. DHW temperature without / with support ⁵	°C	63 / 70			
	Noise power emission level ⁶	db	35 to 46			
	Energy label / ηs / SCOP W35 average climate control	-	A+++ / 184% / 4,70			
	Energy label / ηs / SCOP W55 average climate control	-	A++ / 146% / 3,76			
	OPERATION LIMITS	Distribution / Set heating outlet temperature range	°C	10 to 60 / 20 to 60		
Distribution / Set cooling outlet temperature range		°C	5 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	1,4		1,5	
	Compressor oil type / load	kg	POE / 1,18			
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			
	Transformer secondary circuit fuse	A	2,5			
ELECTRICAL DATA: SINGLE-PHASE	1/N/PE 230 V / 50-60 Hz ⁸	-	✓			
	Maximum recommended external protection ⁹	-	C32A			
	Maximum consumption ² , B0W35	kW / A	5,5 / 23,9			
	Maximum consumption ² , B0W55	kW / A	5,5 / 23,9			
	Minimum / Maximum starting current ⁷	A	2,6 / 12,5			
	Correction of cosine Ø	-	0,96 / 1			
ELECTRICAL DATA: THREE-PHASE	3/N/PE 400 V / 50-60Hz ⁸	-	✓			
	Maximum recommended external protection ⁹	-	C16A			
	Maximum consumption ² , B0W35	kW / A	6,0 / 8,7			
	Maximum consumption ² , B0W55	kW / A	6,0 / 8,7			
	Minimum / Maximum starting current ⁷	A	0,9 / 4,2			
	Correction of cosine Ø	-	0,96 / 1			
DIMENSIONS/WEIGHT	Height x width x depth	mm	ecoGEO+ B: 1060x600x710 · ecoGEO+ C: 1845x600x720			
	Empty weight (without assembly)	kg	B 185 · C 247	B 193 · C 255	B 185 · C 247	B 193 · C 255

- 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.
- 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

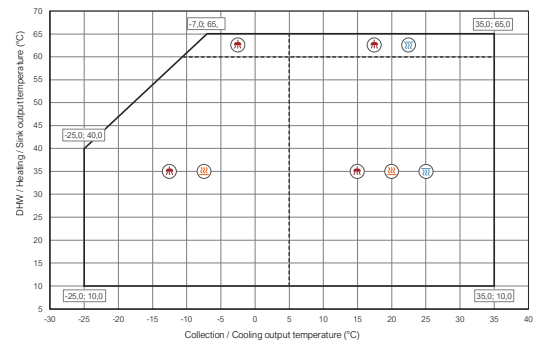
ecoGEO+ B

ecoGEO+ C

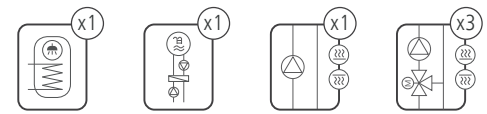


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| 1. Heating/Cooling Outlet - 1 1/4" M | 6. DHW System Inlet - 1 1/4" M |
| 2. Heating/Cooling Inlet - 1 1/4" M | 7. CW Inlet - 1" F |
| 3. Brine Outlet - 1 1/4" M | 8. DHW Outlet - 1" F |
| 4. Brine Inlet - 1 1/4" M | 9. DHW Recirculation Inlet -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

Operational chart

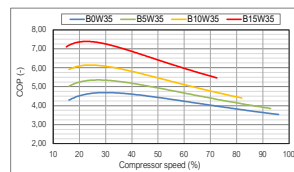
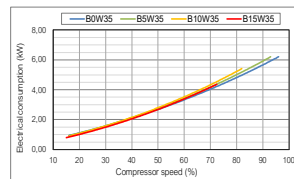
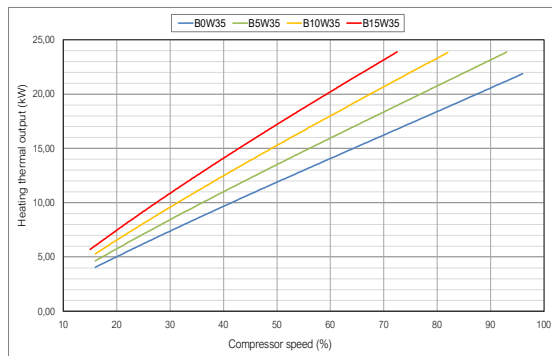


Installation management



Performance curves

Thermal performance



Hydraulic performance

