HEAT PUMP: ecoGEO 12-40

- The thermal power control can modulate within a large range (25-100%) and control the flow of the brine and the production circuit.
- Integrated management of up to 5 different distribution temperatures, 2 different buffer tanks (1 for cooling and 1 for heating), 1 DHW tank, 1 pool and the daily schedule of DHW recirculation.
- Integrated management of external variable or ON/OFF auxiliary systems such as boilers or electric resistances.
- Management of cascade systems up to 6 units.
- Integrated management of simultaneous heating/cooling

systems according to the scheme.

- Passive Cooling management.
 Integrated Active cooling in HP3 models.
- Three- phase electrical power supply.
- Compatibility with e-manager and e-system
- Intégrated energy meters to measure the electric consumption, the heating/cooling thermal power, the COP and the monthly and annual SPF.

ecoGEQHP



PECIFICATIONS ECOGE	O HP 12-40	UNITS	HP1	HP3
APPLICATION	Place of installation	-	Indoors	
	Type of brine system	-	Ground source / Air source ¹ / Hybrid ¹	
	Heating, DHW in external tank and pool	-	\checkmark	
	Integrated Active cooling	-	√*	√**
	External Passive cooling management	-	\checkmark	
PERFORMANCE	Modulation range of the compressor	%	25 to 100	
	Heating power ² , B0W35	kW	10,7 to 44,6	
	COP ² , BOW35	-	4,6	
	Active cooling power ² , B35W7	kW	-	11,3 to 45,8
	EER ² , B35W7	-	-	4,4
	Max. DHW temperature without support	°C	60	
	Max. DHW temperature with support	°C	70	
	Noise emission level ³	db	43 to 58	
	Energy label / η_{s} with average climate control	-	A++ / 187%	
WORKING 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	°C	-20 to +35	
	Brine outlet temperature in cooling mode range	°C	10 to 60	
	Refrigerant circuit pressure min / max	bar	2 / 45	
	Heating / Cooling circuit pressure	bar	0,5 to 3	
	Brine circuit pressure	bar	0,5 to 3	
WORKING FLUIDS	R410A Refrigerant load	kg	4	4,2
	Compressor oil type / load	kg	POE / 3,3	
Control Electrical Data	1/N/PE 230 V / 50-60 Hz	-	√	
	Maximum external recommended protection ⁴	A	C16A	
	Transformer primary circuit fuse	A	0,5A	
	Transformer secondary circuit fuse	A	2,5	
ELECTRICAL DATA: THREE-PHASE POWER SUPPLY	3/N/PE 400 V / 50-60Hz	-	\checkmark	
	Maximum external recommended protection ⁴	A	C25A	
	Maximum consumption ² , B0W35	kW/A	10,9 / 17,7	
	Maximum consumption ² , B0W55	kW/A	15,5 / 24,6	
	Starting current min/max	A	9,8	
	Correction of cosine Ø	-	0,96-1	
DIMENSIONS/WEIGHT	Height x width x depth	mm	1000x950x900	
	Empty weight (without assembly)	kg	280	285

1. With the use of the source manager.

2. According to EN 14511, including circulation pumps and Inverter.

 According to EN 12102, with the acoustic isolation kit of the compressor.
 The maximum consumption can vary significantly with operation conditions, or if the compression acoustic sectors.

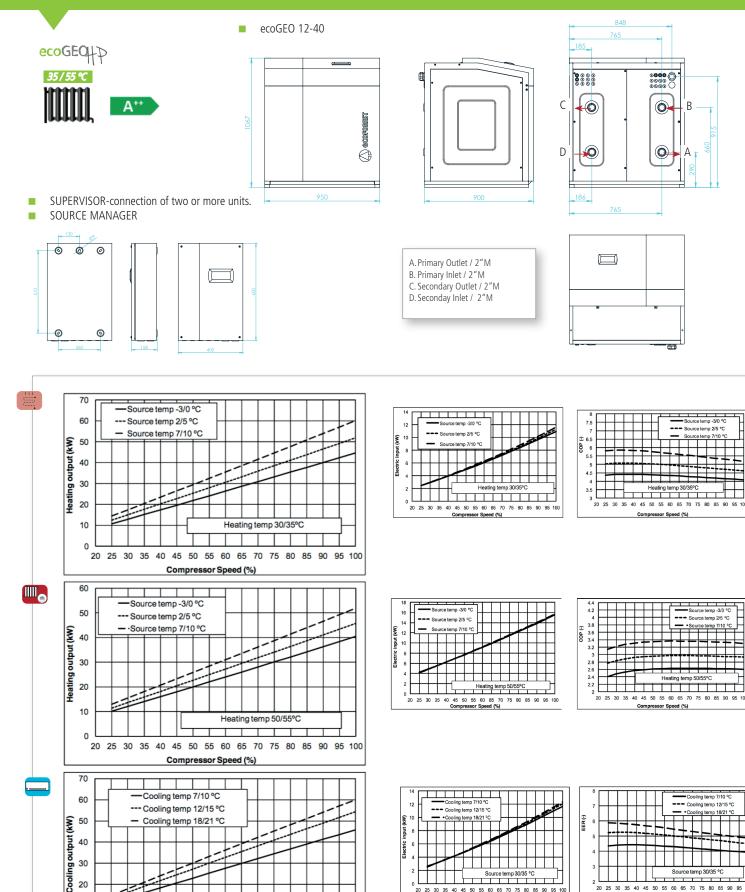
if the operating range of the compressor is limited. Check the service manual for more details. * Depends on the scheme

** The Reverse cycle is made internally by means of the 4-way-valve

Note: Circulating pumps of the primary and secondary circuits not included.



HEAT PUMP: ecoGEO 12-40



30

20

10

0

20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 10

Compressor Speed (%)

temp 30/35



Source temp 30/35 °C

20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 10 Compressor Speed (%)

В

А

Source temp 2/5 °C

75

Source temp 30/35 °C Т Т

20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 Compressor Speed (%)