

This information was generated by the HP KEYMARK database on 17 Dec 2020

Summary of	ECOGEO B/C 1 1-9kW	Reg. No.	011-1W0326
Certificate Holder			
Name	Ecoforest Geotermia S.L.		
Address	Rúa das Pontes, 25	Zip	36350
City	Nigrán (Pontevedra)	Country	Spain
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Name of testing laboratory	AIT Austrian Institute of Technology GmbH		
Subtype title	ECOGEO B/C 1 1-9kW		
Heat Pump Type	Brine/Water		
Refrigerant	R410a		
Mass Of Refrigerant	0.9 kg		
Certification Date	28.05.2019		

## Model: ECOGEO C1 T 1-9kW

### General Data

Power supply	3x400V 50Hz
Off-peak product	Yes

## Heating

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

### EN 14511-2

	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
El input	0.91 kW	1.70 kW
COP	4.52	2.83
Indoor water flow rate	0.69 m <sup>3</sup> /h	0.51 m <sup>3</sup> /h

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	54 dB(A)	54 dB(A)

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<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	196 %	142 %
Prated	11.00 kW	11.00 kW
SCOP	4.85	3.54
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.59 kW	9.03 kW
COP Tj = -7°C	3.85	2.72
Cdh	0.99	0.99
Pdh Tj = +2°C	5.98 kW	6.07 kW
COP Tj = +2°C	4.89	3.52
Cdh	0.99	0.99
Pdh Tj = +7°C	3.81 kW	3.95 kW
COP Tj = +7°C	5.74	4.31
Cdh	0.98	0.98
Pdh Tj = 12°C	1.73 kW	1.67 kW
COP Tj = 12°C	4.93	3.80
Cdh	0.96	0.97
Pdh Tj = Tbiv	10.69 kW	10.05 kW
COP Tj = Tbiv	3.52	2.48

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Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	4699 kWh	6418 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	192 %	145 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.62
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.69 kW	10.05 kW
COP Tj = +2°C	3.55	2.48

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Cdh	0.99	0.99
Pdh Tj = +7°C	7.62 kW	7.21 kW
COP Tj = +7°C	4.31	3.12
Cdh	0.99	0.99
Pdh Tj = 12°C	3.33 kW	3.26 kW
COP Tj = 12°C	5.72	4.50
Cdh	0.98	0.98
Pdh Tj = Tbiv	10.69 kW	10.05 kW
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Pdh Tj = TOL	10.69 kW	10.05 kW
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WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

## Colder Climate

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**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	196 %	130 %
Prated	11.00 kW	11.00 kW
SCOP	4.91	3.25
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.17 kW	6.81 kW
COP Tj = -7°C	4.47	3.62
Cdh	0.99	0.99
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.98	0.98
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.97	0.97
Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.96	0.95
Pdh Tj = Tbiv	7.72 kW	7.59 kW
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Pdh Tj = TOL	10.69 kW	10.05 kW
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WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	5522 kWh	8260 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.90	9.31
COP Tj = -15°C (if TOL<-20°C)	4.20	3.09
Cdh	0.99	0.99

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	2.07
Heating up time	01:43:10 h:min
Standby power input	88.2 W
Reference hot water temperature	58.9 °C
Mixed water at 40°C	227 l

## Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	2.07
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Standby power input	88.2 W
Reference hot water temperature	58.9 °C
Mixed water at 40°C	227 l

## Model: ECOGEO C2 T 1-9kW

### General Data

Power supply	3x400V 50Hz
Off-peak product	Yes

## Heating

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

### EN 14511-2

	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
El input	0.91 kW	1.70 kW
COP	4.52	2.83
Indoor water flow rate	0.69 m <sup>3</sup> /h	0.51 m <sup>3</sup> /h

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	54 dB(A)	54 dB(A)

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	<b>Low temperature</b>	<b>Medium temperature</b>
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PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	4699 kWh	6418 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
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SCOP	4.80	3.62
Tbiv	2 °C	2 °C
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Pdh Tj = +2°C	10.69 kW	10.05 kW
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

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PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	5522 kWh	8260 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.90	9.31
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Standby power input	88.2 W
Reference hot water temperature	58.9 °C
Mixed water at 40°C	227 l

## Model: ECOGEO B1 T 1-9kW

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

### EN 14511-2

	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
El input	0.91 kW	1.70 kW
COP	4.52	2.83
Indoor water flow rate	0.69 m <sup>3</sup> /h	0.51 m <sup>3</sup> /h

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	54 dB(A)	54 dB(A)

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**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	196 %	142 %
Prated	11.00 kW	11.00 kW
SCOP	4.85	3.54
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.59 kW	9.03 kW
COP Tj = -7°C	3.85	2.72
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WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	4699 kWh	6418 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	192 %	145 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.62
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.69 kW	10.05 kW
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

## Colder Climate

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Prated	11.00 kW	11.00 kW
SCOP	4.91	3.25
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.17 kW	6.81 kW
COP Tj = -7°C	4.47	3.62
Cdh	0.99	0.99
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.98	0.98
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.97	0.97
Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
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Pdh Tj = Tbiv	7.72 kW	7.59 kW
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Pdh Tj = TOL	10.69 kW	10.05 kW
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WTOL	60 °C	60 °C
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PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	5522 kWh	8260 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.90	9.31
COP Tj = -15°C (if TOL<-20°C)	4.20	3.09
Cdh	0.99	0.99

## Model: ECOGEO B2 T 1-9kW

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

### EN 14511-2

	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
El input	0.91 kW	1.70 kW
COP	4.52	2.83
Indoor water flow rate	0.69 m <sup>3</sup> /h	0.51 m <sup>3</sup> /h

## Average Climate

### EN 12102-1

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Sound power level indoor	54 dB(A)	54 dB(A)



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	<b>Low temperature</b>	<b>Medium temperature</b>
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Cdh	0.99	0.99

## Model: ECOGEO C1 1-9kW

General Data	
Power supply	1x230V 50Hz
Off-peak product	Yes

### Heating

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
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Indoor water flow rate	0.69 m <sup>3</sup> /h	0.51 m <sup>3</sup> /h

### Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	54 dB(A)	54 dB(A)

This information was generated by the HP KEYMARK database on 17 Dec 2020

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	196 %	142 %
Prated	11.00 kW	11.00 kW
SCOP	4.85	3.54
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.59 kW	9.03 kW
COP Tj = -7°C	3.85	2.72
Cdh	0.99	0.99
Pdh Tj = +2°C	5.98 kW	6.07 kW
COP Tj = +2°C	4.89	3.52
Cdh	0.99	0.99
Pdh Tj = +7°C	3.81 kW	3.95 kW
COP Tj = +7°C	5.74	4.31
Cdh	0.98	0.98
Pdh Tj = 12°C	1.73 kW	1.67 kW
COP Tj = 12°C	4.93	3.80
Cdh	0.96	0.97
Pdh Tj = Tbiv	10.69 kW	10.05 kW
COP Tj = Tbiv	3.52	2.48

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	4699 kWh	6418 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	192 %	145 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.62
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.69 kW	10.05 kW
COP Tj = +2°C	3.55	2.48



This information was generated by the HP KEYMARK database on 17 Dec 2020

Cdh	0.99	0.99
Pdh Tj = +7°C	7.62 kW	7.21 kW
COP Tj = +7°C	4.31	3.12
Cdh	0.99	0.99
Pdh Tj = 12°C	3.33 kW	3.26 kW
COP Tj = 12°C	5.72	4.50
Cdh	0.98	0.98
Pdh Tj = Tbiv	10.69 kW	10.05 kW
COP Tj = Tbiv	3.55	2.48
Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

## Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	196 %	130 %
Prated	11.00 kW	11.00 kW
SCOP	4.91	3.25
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.17 kW	6.81 kW
COP Tj = -7°C	4.47	3.62
Cdh	0.99	0.99
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.98	0.98
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.97	0.97
Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.96	0.95
Pdh Tj = Tbiv	7.72 kW	7.59 kW
COP Tj = Tbiv	4.51	3.25

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	5522 kWh	8260 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.90	9.31
COP Tj = -15°C (if TOL<-20°C)	4.20	3.09
Cdh	0.99	0.99

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	2.07
Heating up time	01:43:10 h:min
Standby power input	88.2 W
Reference hot water temperature	58.9 °C
Mixed water at 40°C	227 l

## Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	2.07
Heating up time	01:43:10 h:min
Standby power input	88.2 W
Reference hot water temperature	58.9 °C
Mixed water at 40°C	227 l

## Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	2.07
Heating up time	01:43:10 h:min
Standby power input	88.2 W
Reference hot water temperature	58.9 °C
Mixed water at 40°C	227 l

## Model: ECOGEO C2 1-9kW

### General Data

Power supply	1x230V 50Hz
Off-peak product	Yes

## Heating

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

### EN 14511-2

	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
El input	0.91 kW	1.70 kW
COP	4.52	2.83
Indoor water flow rate	0.69 m <sup>3</sup> /h	0.51 m <sup>3</sup> /h

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	54 dB(A)	54 dB(A)

This information was generated by the HP KEYMARK database on 17 Dec 2020

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	196 %	142 %
Prated	11.00 kW	11.00 kW
SCOP	4.85	3.54
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.59 kW	9.03 kW
COP Tj = -7°C	3.85	2.72
Cdh	0.99	0.99
Pdh Tj = +2°C	5.98 kW	6.07 kW
COP Tj = +2°C	4.89	3.52
Cdh	0.99	0.99
Pdh Tj = +7°C	3.81 kW	3.95 kW
COP Tj = +7°C	5.74	4.31
Cdh	0.98	0.98
Pdh Tj = 12°C	1.73 kW	1.67 kW
COP Tj = 12°C	4.93	3.80
Cdh	0.96	0.97
Pdh Tj = Tbiv	10.69 kW	10.05 kW
COP Tj = Tbiv	3.52	2.48

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	4699 kWh	6418 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	192 %	145 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.62
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.69 kW	10.05 kW
COP Tj = +2°C	3.55	2.48



This information was generated by the HP KEYMARK database on 17 Dec 2020

Cdh	0.99	0.99
Pdh Tj = +7°C	7.62 kW	7.21 kW
COP Tj = +7°C	4.31	3.12
Cdh	0.99	0.99
Pdh Tj = 12°C	3.33 kW	3.26 kW
COP Tj = 12°C	5.72	4.50
Cdh	0.98	0.98
Pdh Tj = Tbiv	10.69 kW	10.05 kW
COP Tj = Tbiv	3.55	2.48
Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

## Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	196 %	130 %
Prated	11.00 kW	11.00 kW
SCOP	4.91	3.25
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.17 kW	6.81 kW
COP Tj = -7°C	4.47	3.62
Cdh	0.99	0.99
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.98	0.98
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.97	0.97
Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.96	0.95
Pdh Tj = Tbiv	7.72 kW	7.59 kW
COP Tj = Tbiv	4.51	3.25

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	5522 kWh	8260 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.90	9.31
COP Tj = -15°C (if TOL<-20°C)	4.20	3.09
Cdh	0.99	0.99

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	2.07
Heating up time	01:43:10 h:min
Standby power input	88.2 W
Reference hot water temperature	58.9 °C
Mixed water at 40°C	227 l

## Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	2.07
Heating up time	01:43:10 h:min
Standby power input	88.2 W
Reference hot water temperature	58.9 °C
Mixed water at 40°C	227 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	2.07
Heating up time	01:43:10 h:min
Standby power input	88.2 W
Reference hot water temperature	58.9 °C
Mixed water at 40°C	227 l

## Model: ECOGEO B1 1-9kW

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

### EN 14511-2

	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
El input	0.91 kW	1.70 kW
COP	4.52	2.83
Indoor water flow rate	0.69 m <sup>3</sup> /h	0.51 m <sup>3</sup> /h

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	54 dB(A)	54 dB(A)

This information was generated by the HP KEYMARK database on 17 Dec 2020

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	196 %	142 %
Prated	11.00 kW	11.00 kW
SCOP	4.85	3.54
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.59 kW	9.03 kW
COP Tj = -7°C	3.85	2.72
Cdh	0.99	0.99
Pdh Tj = +2°C	5.98 kW	6.07 kW
COP Tj = +2°C	4.89	3.52
Cdh	0.99	0.99
Pdh Tj = +7°C	3.81 kW	3.95 kW
COP Tj = +7°C	5.74	4.31
Cdh	0.98	0.98
Pdh Tj = 12°C	1.73 kW	1.67 kW
COP Tj = 12°C	4.93	3.80
Cdh	0.96	0.97
Pdh Tj = Tbiv	10.69 kW	10.05 kW
COP Tj = Tbiv	3.52	2.48

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	4699 kWh	6418 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	192 %	145 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.62
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.69 kW	10.05 kW
COP Tj = +2°C	3.55	2.48



This information was generated by the HP KEYMARK database on 17 Dec 2020

Cdh	0.99	0.99
Pdh Tj = +7°C	7.62 kW	7.21 kW
COP Tj = +7°C	4.31	3.12
Cdh	0.99	0.99
Pdh Tj = 12°C	3.33 kW	3.26 kW
COP Tj = 12°C	5.72	4.50
Cdh	0.98	0.98
Pdh Tj = Tbiv	10.69 kW	10.05 kW
COP Tj = Tbiv	3.55	2.48
Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

## Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	196 %	130 %
Prated	11.00 kW	11.00 kW
SCOP	4.91	3.25
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.17 kW	6.81 kW
COP Tj = -7°C	4.47	3.62
Cdh	0.99	0.99
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.98	0.98
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.97	0.97
Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.96	0.95
Pdh Tj = Tbiv	7.72 kW	7.59 kW
COP Tj = Tbiv	4.51	3.25

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	5522 kWh	8260 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.90	9.31
COP Tj = -15°C (if TOL<-20°C)	4.20	3.09
Cdh	0.99	0.99

## Model: ECOGEO B2 1-9kW

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

### EN 14511-2

	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
El input	0.91 kW	1.70 kW
COP	4.52	2.83
Indoor water flow rate	0.69 m <sup>3</sup> /h	0.51 m <sup>3</sup> /h

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	54 dB(A)	54 dB(A)

This information was generated by the HP KEYMARK database on 17 Dec 2020

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	196 %	142 %
Prated	11.00 kW	11.00 kW
SCOP	4.85	3.54
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.59 kW	9.03 kW
COP Tj = -7°C	3.85	2.72
Cdh	0.99	0.99
Pdh Tj = +2°C	5.98 kW	6.07 kW
COP Tj = +2°C	4.89	3.52
Cdh	0.99	0.99
Pdh Tj = +7°C	3.81 kW	3.95 kW
COP Tj = +7°C	5.74	4.31
Cdh	0.98	0.98
Pdh Tj = 12°C	1.73 kW	1.67 kW
COP Tj = 12°C	4.93	3.80
Cdh	0.96	0.97
Pdh Tj = Tbiv	10.69 kW	10.05 kW
COP Tj = Tbiv	3.52	2.48

This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	4699 kWh	6418 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	192 %	145 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.62
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.69 kW	10.05 kW
COP Tj = +2°C	3.55	2.48

This information was generated by the HP KEYMARK database on 17 Dec 2020

Cdh	0.99	0.99
Pdh Tj = +7°C	7.62 kW	7.21 kW
COP Tj = +7°C	4.31	3.12
Cdh	0.99	0.99
Pdh Tj = 12°C	3.33 kW	3.26 kW
COP Tj = 12°C	5.72	4.50
Cdh	0.98	0.98
Pdh Tj = Tbiv	10.69 kW	10.05 kW
COP Tj = Tbiv	3.55	2.48
Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

## Colder Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	196 %	130 %
Prated	11.00 kW	11.00 kW
SCOP	4.91	3.25
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.17 kW	6.81 kW
COP Tj = -7°C	4.47	3.62
Cdh	0.99	0.99
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.98	0.98
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.97	0.97
Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.96	0.95
Pdh Tj = Tbiv	7.72 kW	7.59 kW
COP Tj = Tbiv	4.51	3.25



This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = TOL	10.69 kW	10.05 kW
COP Tj = TOL	3.55	2.48
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	5522 kWh	8260 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.90	9.31
COP Tj = -15°C (if TOL<-20°C)	4.20	3.09
Cdh	0.99	0.99