

This information was generated by the HP KEYMARK database on 1 Mar 2021

Summary of	ECOGEO B/C 3 1-9kW	Reg. No.	011-1W0329
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		
Subtype title	ECOGEO B/C 3 1-9kW		
Heat Pump Type	Brine/Water		
Refrigerant	R410a		
Mass Of Refrigerant	1 kg		
Certification Date	28.05.2019		

## Model: ECOGEO C3 T 1-9kW

### General Data

Power supply	3x400V 50Hz
Off-peak product	Yes

## Heating

### 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

### EN 14511-4

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

## 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>
$\eta_s$	193 %	140 %
Prated	11.00 kW	11.00 kW
SCOP	4.84	3.51
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.69 kW	9.46 kW
COP Tj = -7°C	3.81	2.60
Cdh	0.990	0.990
Pdh Tj = +2°C	5.98 kW	6.07 kW
COP Tj = +2°C	4.89	3.52
Cdh	0.990	0.990
Pdh Tj = +7°C	3.81 kW	3.95 kW
COP Tj = +7°C	5.74	4.31
Cdh	0.980	0.980
Pdh Tj = 12°C	1.73 kW	1.67 kW
COP Tj = 12°C	4.93	3.80
Cdh	0.960	0.970
Pdh Tj = Tbiv	10.85 kW	10.06 kW
COP Tj = Tbiv	3.52	2.38

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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 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 %	144 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.61
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.85 kW	10.06 kW
COP Tj = +2°C	3.52	2.38

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Cdh	0.990	0.990
Pdh Tj = +7°C	7.62 kW	7.21 kW
COP Tj = +7°C	4.31	3.12
Cdh	0.990	0.990
Pdh Tj = 12°C	3.33 kW	3.26 kW
COP Tj = 12°C	5.72	4.50
Cdh	0.980	0.980
Pdh Tj = Tbiv	10.85 kW	10.06 kW
COP Tj = Tbiv	3.52	2.38
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

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

## Colder Climate

<b>EN 14825</b>		
	<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	0.990	0.990
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.980	0.980
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.970	0.970

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Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.960	0.950
Pdh Tj = Tbiv	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 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

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

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	1.73
Heating up time	01:23:00 h:min
Standby power input	158.9 W
Reference hot water temperature	57.8 °C
Mixed water at 40°C	224 l

### Warmer Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	1.73
Heating up time	01:23:00 h:min
Standby power input	158.9 W
Reference hot water temperature	57.8 °C
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## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	1.73
Heating up time	01:23:00 h:min
Standby power input	158.9 W
Reference hot water temperature	57.8 °C
Mixed water at 40°C	224 l

## Model: ECOGEO C4 T 1-9kW

### General Data

Power supply	3x400V 50Hz
Off-peak product	Yes

## Heating

### 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

### EN 14511-4

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

## 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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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	0.15 kW	0.94 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 %	144 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.61
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.85 kW	10.06 kW
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Cdh	0.990	0.990
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COP Tj = 12°C	5.72	4.50
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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	0.15 kW	0.94 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

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

## Colder Climate

<b>EN 14825</b>		
	<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	0.990	0.990
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.980	0.980
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.970	0.970

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Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.960	0.950
Pdh Tj = Tbiv	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 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

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

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	1.73
Heating up time	01:23:00 h:min
Standby power input	158.9 W
Reference hot water temperature	57.8 °C
Mixed water at 40°C	224 l

### Warmer Climate



<b>EN 16147</b>	
Declared load profile	L
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## Colder Climate

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Heating up time	01:23:00 h:min
Standby power input	158.9 W
Reference hot water temperature	57.8 °C
Mixed water at 40°C	224 l

## Model: ECOGEO B3 T 1-9kW

### General Data

Power supply	3x400V 50Hz
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## Heating

### 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

### EN 14511-4

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

## 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 1 Mar 2021

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	193 %	140 %
Prated	11.00 kW	11.00 kW
SCOP	4.84	3.51
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.69 kW	9.46 kW
COP Tj = -7°C	3.81	2.60
Cdh	0.990	0.990
Pdh Tj = +2°C	5.98 kW	6.07 kW
COP Tj = +2°C	4.89	3.52
Cdh	0.990	0.990
Pdh Tj = +7°C	3.81 kW	3.95 kW
COP Tj = +7°C	5.74	4.31
Cdh	0.980	0.980
Pdh Tj = 12°C	1.73 kW	1.67 kW
COP Tj = 12°C	4.93	3.80
Cdh	0.960	0.970
Pdh Tj = Tbiv	10.85 kW	10.06 kW
COP Tj = Tbiv	3.52	2.38

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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 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 %	144 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.61
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.85 kW	10.06 kW
COP Tj = +2°C	3.52	2.38

This information was generated by the HP KEYMARK database on 1 Mar 2021

Cdh	0.990	0.990
Pdh Tj = +7°C	7.62 kW	7.21 kW
COP Tj = +7°C	4.31	3.12
Cdh	0.990	0.990
Pdh Tj = 12°C	3.33 kW	3.26 kW
COP Tj = 12°C	5.72	4.50
Cdh	0.980	0.980
Pdh Tj = Tbiv	10.85 kW	10.06 kW
COP Tj = Tbiv	3.52	2.38
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
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PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.15 kW	0.94 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

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

## Colder Climate

<b>EN 14825</b>		
	<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	0.990	0.990
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.980	0.980
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.970	0.970

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Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.960	0.950
Pdh Tj = Tbiv	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
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PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.15 kW	0.94 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

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



## Model: ECOGEO B4 T 1-9kW

### General Data

Power supply	3x400V 50Hz
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## Heating

### 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

### EN 14511-4

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

## 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 1 Mar 2021

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	193 %	140 %
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SCOP	4.84	3.51
Tbiv	-10 °C	-10 °C
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.15 kW	0.94 kW
Annual energy consumption Qhe	4699 kWh	6418 kWh

## Warmer Climate

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	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	192 %	144 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.61
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.85 kW	10.06 kW
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## Colder Climate

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COP Tj = +7°C	5.74	6.00
Cdh	0.970	0.970

This information was generated by the HP KEYMARK database on 1 Mar 2021

Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.960	0.950
Pdh Tj = Tbiv	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 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

This information was generated by the HP KEYMARK database on 1 Mar 2021

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

## Model: ECOGEO C3 1-9kW

### General Data

Power supply	1x230V 50Hz
Off-peak product	Yes

## Heating

### 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

### EN 14511-4

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

## 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 1 Mar 2021

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	193 %	140 %
Prated	11.00 kW	11.00 kW
SCOP	4.84	3.51
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.69 kW	9.46 kW
COP Tj = -7°C	3.81	2.60
Cdh	0.990	0.990
Pdh Tj = +2°C	5.98 kW	6.07 kW
COP Tj = +2°C	4.89	3.52
Cdh	0.990	0.990
Pdh Tj = +7°C	3.81 kW	3.95 kW
COP Tj = +7°C	5.74	4.31
Cdh	0.980	0.980
Pdh Tj = 12°C	1.73 kW	1.67 kW
COP Tj = 12°C	4.93	3.80
Cdh	0.960	0.970
Pdh Tj = Tbiv	10.85 kW	10.06 kW
COP Tj = Tbiv	3.52	2.38

This information was generated by the HP KEYMARK database on 1 Mar 2021

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 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 %	144 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.61
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.85 kW	10.06 kW
COP Tj = +2°C	3.52	2.38

This information was generated by the HP KEYMARK database on 1 Mar 2021

Cdh	0.990	0.990
Pdh Tj = +7°C	7.62 kW	7.21 kW
COP Tj = +7°C	4.31	3.12
Cdh	0.990	0.990
Pdh Tj = 12°C	3.33 kW	3.26 kW
COP Tj = 12°C	5.72	4.50
Cdh	0.980	0.980
Pdh Tj = Tbiv	10.85 kW	10.06 kW
COP Tj = Tbiv	3.52	2.38
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

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

## Colder Climate

<b>EN 14825</b>		
	<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	0.990	0.990
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.980	0.980
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.970	0.970

This information was generated by the HP KEYMARK database on 1 Mar 2021

Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.960	0.950
Pdh Tj = Tbiv	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 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

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

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	1.73
Heating up time	01:23:00 h:min
Standby power input	158.9 W
Reference hot water temperature	57.8 °C
Mixed water at 40°C	224 l

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	1.73
Heating up time	01:23:00 h:min
Standby power input	158.9 W
Reference hot water temperature	57.8 °C
Mixed water at 40°C	224 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	1.73
Heating up time	01:23:00 h:min
Standby power input	158.9 W
Reference hot water temperature	57.8 °C
Mixed water at 40°C	224 l

## Model: ECOGEO C4 1-9kW

### General Data

Power supply	1x230V 50Hz
Off-peak product	Yes

## Heating

### 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

### EN 14511-4

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

## Average Climate

### EN 12102-1

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



<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	193 %	140 %
Prated	11.00 kW	11.00 kW
SCOP	4.84	3.51
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.69 kW	9.46 kW
COP Tj = -7°C	3.81	2.60
Cdh	0.990	0.990
Pdh Tj = +2°C	5.98 kW	6.07 kW
COP Tj = +2°C	4.89	3.52
Cdh	0.990	0.990
Pdh Tj = +7°C	3.81 kW	3.95 kW
COP Tj = +7°C	5.74	4.31
Cdh	0.980	0.980
Pdh Tj = 12°C	1.73 kW	1.67 kW
COP Tj = 12°C	4.93	3.80
Cdh	0.960	0.970
Pdh Tj = Tbiv	10.85 kW	10.06 kW
COP Tj = Tbiv	3.52	2.38

This information was generated by the HP KEYMARK database on 1 Mar 2021

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 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 %	144 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.61
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.85 kW	10.06 kW
COP Tj = +2°C	3.52	2.38

This information was generated by the HP KEYMARK database on 1 Mar 2021

Cdh	0.990	0.990
Pdh Tj = +7°C	7.62 kW	7.21 kW
COP Tj = +7°C	4.31	3.12
Cdh	0.990	0.990
Pdh Tj = 12°C	3.33 kW	3.26 kW
COP Tj = 12°C	5.72	4.50
Cdh	0.980	0.980
Pdh Tj = Tbiv	10.85 kW	10.06 kW
COP Tj = Tbiv	3.52	2.38
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

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

## Colder Climate

<b>EN 14825</b>		
	<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	0.990	0.990
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.980	0.980
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.970	0.970

This information was generated by the HP KEYMARK database on 1 Mar 2021

Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.960	0.950
Pdh Tj = Tbiv	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 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

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

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	1.73
Heating up time	01:23:00 h:min
Standby power input	158.9 W
Reference hot water temperature	57.8 °C
Mixed water at 40°C	224 l

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	1.73
Heating up time	01:23:00 h:min
Standby power input	158.9 W
Reference hot water temperature	57.8 °C
Mixed water at 40°C	224 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	78 %
COP	1.73
Heating up time	01:23:00 h:min
Standby power input	158.9 W
Reference hot water temperature	57.8 °C
Mixed water at 40°C	224 l

## Model: ECOGEO B3 1-9kW

### General Data

Power supply	1x230V 50Hz
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## Heating

### 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

### EN 14511-4

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

## 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 1 Mar 2021

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	193 %	140 %
Prated	11.00 kW	11.00 kW
SCOP	4.84	3.51
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.69 kW	9.46 kW
COP Tj = -7°C	3.81	2.60
Cdh	0.990	0.990
Pdh Tj = +2°C	5.98 kW	6.07 kW
COP Tj = +2°C	4.89	3.52
Cdh	0.990	0.990
Pdh Tj = +7°C	3.81 kW	3.95 kW
COP Tj = +7°C	5.74	4.31
Cdh	0.980	0.980
Pdh Tj = 12°C	1.73 kW	1.67 kW
COP Tj = 12°C	4.93	3.80
Cdh	0.960	0.970
Pdh Tj = Tbiv	10.85 kW	10.06 kW
COP Tj = Tbiv	3.52	2.38

This information was generated by the HP KEYMARK database on 1 Mar 2021

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 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 %	144 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.61
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.85 kW	10.06 kW
COP Tj = +2°C	3.52	2.38

This information was generated by the HP KEYMARK database on 1 Mar 2021

Cdh	0.990	0.990
Pdh Tj = +7°C	7.62 kW	7.21 kW
COP Tj = +7°C	4.31	3.12
Cdh	0.990	0.990
Pdh Tj = 12°C	3.33 kW	3.26 kW
COP Tj = 12°C	5.72	4.50
Cdh	0.980	0.980
Pdh Tj = Tbiv	10.85 kW	10.06 kW
COP Tj = Tbiv	3.52	2.38
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 kW
Annual energy consumption Qhe	3062 kWh	4033 kWh

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

## Colder Climate

<b>EN 14825</b>		
	<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	0.990	0.990
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.980	0.980
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.970	0.970

This information was generated by the HP KEYMARK database on 1 Mar 2021

Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.960	0.950
Pdh Tj = Tbiv	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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	0.15 kW	0.94 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

This information was generated by the HP KEYMARK database on 1 Mar 2021

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

## Model: ECOGEO B4 1-9kW

### General Data

Power supply	1x230V 50Hz
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## Heating

### 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

### EN 14511-4

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

## 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 1 Mar 2021

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	193 %	140 %
Prated	11.00 kW	11.00 kW
SCOP	4.84	3.51
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.69 kW	9.46 kW
COP Tj = -7°C	3.81	2.60
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	10.85 kW	10.06 kW
COP Tj = Tbiv	3.52	2.38



This information was generated by the HP KEYMARK database on 1 Mar 2021

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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 %	144 %
Prated	11.00 kW	11.00 kW
SCOP	4.80	3.61
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.85 kW	10.06 kW
COP Tj = +2°C	3.52	2.38

This information was generated by the HP KEYMARK database on 1 Mar 2021

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	10.85 kW	10.06 kW
COP Tj = Tbiv	3.52	2.38
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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

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

## Colder Climate

<b>EN 14825</b>		
	<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	0.990	0.990
Pdh Tj = +2°C	4.33 kW	4.19 kW
COP Tj = +2°C	5.47	4.96
Cdh	0.980	0.980
Pdh Tj = +7°C	2.73 kW	2.69 kW
COP Tj = +7°C	5.74	6.00
Cdh	0.970	0.970

This information was generated by the HP KEYMARK database on 1 Mar 2021

Pdh Tj = 12°C	1.30 kW	1.30 kW
COP Tj = 12°C	3.91	5.15
Cdh	0.960	0.950
Pdh Tj = Tbiv	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.85 kW	10.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.38
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

This information was generated by the HP KEYMARK database on 1 Mar 2021

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