

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

Summary of	ECOGEO B/C 3 3-12kW	Reg. No.	011-1W0330
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 3 3-12kW		
Heat Pump Type	Brine/Water		
Refrigerant	R410a		
Mass Of Refrigerant	1 kg		
Certification Date	28.05.2019		

## Model: ECOGEO C3 T 3-12kW

### General Data

Power supply	3x400V 50Hz
Off-peak product	Yes

## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91
Indoor water flow rate	1.23 m <sup>3</sup> /h	0.72 m <sup>3</sup> /h

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	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>
$\eta_s$	198 %	146 %
Prated	15.00 kW	15.00 kW
SCOP	4.95	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.42 kW	11.87 kW
COP Tj = -7°C	4.05	2.81
Cdh	0.99	0.99
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh	0.99	0.99
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh	0.98	0.99
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh	0.97	0.97
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56

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Pdh Tj = TOL	15.16 kW	13.95 kW
COP Tj = TOL	3.63	2.56
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	6266 kWh	8259 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	191 %	148 %
Prated	15.00 kW	15.00 kW
SCOP	4.78	3.70
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	15.16 kW	13.36 kW
COP Tj = +2°C	3.63	2.58

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Cdh	0.99	0.99
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh	0.99	0.99
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh	0.98	0.98
Pdh Tj = Tbiv	15.16 kW	13.36 kW
COP Tj = Tbiv	3.63	2.58
Pdh Tj = TOL	15.16 kW	13.36 kW
COP Tj = TOL	3.63	2.58
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	4191 kWh	5340 kWh

## Colder Climate

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**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	197 %	130 %
Prated	15.00 kW	15.00 kW
SCOP	4.92	3.24
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	9.89 kW	9.46 kW
COP Tj = -7°C	4.56	3.73
Cdh	0.99	0.99
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh	0.98	0.99
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh	0.98	0.98
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh	0.97	0.97
Pdh Tj = Tbiv	9.67 kW	9.71 kW
COP Tj = Tbiv	4.75	3.40

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Pdh Tj = TOL	15.16 kW	13.95 kW
COP Tj = TOL	3.63	2.56
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	7515 kWh	11094 kWh
Pdh Tj = -15°C (if TOL<-20°C)	13.30	12.58
COP Tj = -15°C (if TOL<-20°C)	4.16	3.14
Cdh	0.99	0.99

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	81 %
COP	2.00
Heating up time	01:18:30 h:min
Standby power input	102.2 W
Reference hot water temperature	58.1 °C
Mixed water at 40°C	233 l

## Warmer Climate

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Efficiency $\eta_{DHW}$	81 %
COP	2.00
Heating up time	01:18:30 h:min
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Standby power input	102.2 W
Reference hot water temperature	58.1 °C
Mixed water at 40°C	233 l

## Model: ECOGEO C4 T 3-12kW

### General Data

Power supply	3x400V 50Hz
Off-peak product	Yes

## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91
Indoor water flow rate	1.23 m <sup>3</sup> /h	0.72 m <sup>3</sup> /h

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	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>
$\eta_s$	198 %	146 %
Prated	15.00 kW	15.00 kW
SCOP	4.95	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.42 kW	11.87 kW
COP Tj = -7°C	4.05	2.81
Cdh	0.99	0.99
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
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Pdh Tj = TOL	15.16 kW	13.95 kW
COP Tj = TOL	3.63	2.56
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	6266 kWh	8259 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	191 %	148 %
Prated	15.00 kW	15.00 kW
SCOP	4.78	3.70
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	15.16 kW	13.36 kW
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Cdh	0.99	0.99
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh	0.99	0.99
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
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Pdh Tj = Tbiv	15.16 kW	13.36 kW
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COP Tj = TOL	3.63	2.58
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	4191 kWh	5340 kWh

## Colder Climate

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**EN 14825**

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Prated	15.00 kW	15.00 kW
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COP Tj = +2°C	5.34	4.78
Cdh	0.98	0.99
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh	0.98	0.98
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh	0.97	0.97
Pdh Tj = Tbiv	9.67 kW	9.71 kW
COP Tj = Tbiv	4.75	3.40

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COP Tj = TOL	3.63	2.56
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
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PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	7515 kWh	11094 kWh
Pdh Tj = -15°C (if TOL<-20°C)	13.30	12.58
COP Tj = -15°C (if TOL<-20°C)	4.16	3.14
Cdh	0.99	0.99

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
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Standby power input	102.2 W
Reference hot water temperature	58.1 °C
Mixed water at 40°C	233 l

## Model: ECOGEO B3 T 3-12kW

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91
Indoor water flow rate	1.23 m <sup>3</sup> /h	0.72 m <sup>3</sup> /h

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	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)

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	198 %	146 %
Prated	15.00 kW	15.00 kW
SCOP	4.95	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.42 kW	11.87 kW
COP Tj = -7°C	4.05	2.81
Cdh	0.99	0.99
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
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COP Tj = +7°C	5.61	4.29
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Pdh Tj = 12°C	2.45 kW	2.47 kW
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COP Tj = TOL	3.63	2.56
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	6266 kWh	8259 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	191 %	148 %
Prated	15.00 kW	15.00 kW
SCOP	4.78	3.70
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	15.16 kW	13.36 kW
COP Tj = +2°C	3.63	2.58

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Cdh	0.99	0.99
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
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Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
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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	6.00 kW	6.00 kW
Annual energy consumption Qhe	4191 kWh	5340 kWh

## Colder Climate

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**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	197 %	130 %
Prated	15.00 kW	15.00 kW
SCOP	4.92	3.24
Tbiv	-10 °C	-10 °C
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Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh	0.98	0.99
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh	0.98	0.98
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh	0.97	0.97
Pdh Tj = Tbiv	9.67 kW	9.71 kW
COP Tj = Tbiv	4.75	3.40

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Pdh Tj = TOL	15.16 kW	13.95 kW
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PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	7515 kWh	11094 kWh
Pdh Tj = -15°C (if TOL<-20°C)	13.30	12.58
COP Tj = -15°C (if TOL<-20°C)	4.16	3.14
Cdh	0.99	0.99

## Model: ECOGEO B4 T 3-12kW

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91
Indoor water flow rate	1.23 m <sup>3</sup> /h	0.72 m <sup>3</sup> /h

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	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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Annual energy consumption Qhe	6266 kWh	8259 kWh

## Warmer Climate

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	<b>Low temperature</b>	<b>Medium temperature</b>
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	4191 kWh	5340 kWh

## Colder Climate

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Cdh	0.99	0.99

## Model: ECOGEO C3 3-12kW

### General Data

Power supply	1x230V 50Hz
Off-peak product	Yes

## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91
Indoor water flow rate	1.23 m <sup>3</sup> /h	0.72 m <sup>3</sup> /h

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	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 17 Dec 2020

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	198 %	146 %
Prated	15.00 kW	15.00 kW
SCOP	4.95	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.42 kW	11.87 kW
COP Tj = -7°C	4.05	2.81
Cdh	0.99	0.99
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh	0.99	0.99
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh	0.98	0.99
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh	0.97	0.97
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56

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

Pdh Tj = TOL	15.16 kW	13.95 kW
COP Tj = TOL	3.63	2.56
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	6266 kWh	8259 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	191 %	148 %
Prated	15.00 kW	15.00 kW
SCOP	4.78	3.70
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	15.16 kW	13.36 kW
COP Tj = +2°C	3.63	2.58



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

Cdh	0.99	0.99
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh	0.99	0.99
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh	0.98	0.98
Pdh Tj = Tbiv	15.16 kW	13.36 kW
COP Tj = Tbiv	3.63	2.58
Pdh Tj = TOL	15.16 kW	13.36 kW
COP Tj = TOL	3.63	2.58
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	4191 kWh	5340 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>
$\eta_s$	197 %	130 %
Prated	15.00 kW	15.00 kW
SCOP	4.92	3.24
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	9.89 kW	9.46 kW
COP Tj = -7°C	4.56	3.73
Cdh	0.99	0.99
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh	0.98	0.99
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh	0.98	0.98
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh	0.97	0.97
Pdh Tj = Tbiv	9.67 kW	9.71 kW
COP Tj = Tbiv	4.75	3.40

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

Pdh Tj = TOL	15.16 kW	13.95 kW
COP Tj = TOL	3.63	2.56
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	7515 kWh	11094 kWh
Pdh Tj = -15°C (if TOL<-20°C)	13.30	12.58
COP Tj = -15°C (if TOL<-20°C)	4.16	3.14
Cdh	0.99	0.99

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	81 %
COP	2.00
Heating up time	01:18:30 h:min
Standby power input	102.2 W
Reference hot water temperature	58.1 °C
Mixed water at 40°C	233 l

## Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	81 %
COP	2.00
Heating up time	01:18:30 h:min
Standby power input	102.2 W
Reference hot water temperature	58.1 °C
Mixed water at 40°C	233 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 $\eta_{DHW}$	81 %
COP	2.00
Heating up time	01:18:30 h:min
Standby power input	102.2 W
Reference hot water temperature	58.1 °C
Mixed water at 40°C	233 l

## Model: ECOGEO C4 3-12kW

### General Data

Power supply	1x230V 50Hz
Off-peak product	Yes

## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91
Indoor water flow rate	1.23 m <sup>3</sup> /h	0.72 m <sup>3</sup> /h

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	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 17 Dec 2020

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	198 %	146 %
Prated	15.00 kW	15.00 kW
SCOP	4.95	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.42 kW	11.87 kW
COP Tj = -7°C	4.05	2.81
Cdh	0.99	0.99
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh	0.99	0.99
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh	0.98	0.99
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh	0.97	0.97
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56

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

Pdh Tj = TOL	15.16 kW	13.95 kW
COP Tj = TOL	3.63	2.56
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	6266 kWh	8259 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	191 %	148 %
Prated	15.00 kW	15.00 kW
SCOP	4.78	3.70
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	15.16 kW	13.36 kW
COP Tj = +2°C	3.63	2.58



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

Cdh	0.99	0.99
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh	0.99	0.99
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh	0.98	0.98
Pdh Tj = Tbiv	15.16 kW	13.36 kW
COP Tj = Tbiv	3.63	2.58
Pdh Tj = TOL	15.16 kW	13.36 kW
COP Tj = TOL	3.63	2.58
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	4191 kWh	5340 kWh

## Colder Climate

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	197 %	130 %
Prated	15.00 kW	15.00 kW
SCOP	4.92	3.24
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	9.89 kW	9.46 kW
COP Tj = -7°C	4.56	3.73
Cdh	0.99	0.99
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh	0.98	0.99
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh	0.98	0.98
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh	0.97	0.97
Pdh Tj = Tbiv	9.67 kW	9.71 kW
COP Tj = Tbiv	4.75	3.40

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

Pdh Tj = TOL	15.16 kW	13.95 kW
COP Tj = TOL	3.63	2.56
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	7515 kWh	11094 kWh
Pdh Tj = -15°C (if TOL<-20°C)	13.30	12.58
COP Tj = -15°C (if TOL<-20°C)	4.16	3.14
Cdh	0.99	0.99

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	81 %
COP	2.00
Heating up time	01:18:30 h:min
Standby power input	102.2 W
Reference hot water temperature	58.1 °C
Mixed water at 40°C	233 l

## Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	81 %
COP	2.00
Heating up time	01:18:30 h:min
Standby power input	102.2 W
Reference hot water temperature	58.1 °C
Mixed water at 40°C	233 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 $\eta_{DHW}$	81 %
COP	2.00
Heating up time	01:18:30 h:min
Standby power input	102.2 W
Reference hot water temperature	58.1 °C
Mixed water at 40°C	233 l

## Model: ECOGEO B3 3-12kW

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91
Indoor water flow rate	1.23 m <sup>3</sup> /h	0.72 m <sup>3</sup> /h

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	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 17 Dec 2020

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	198 %	146 %
Prated	15.00 kW	15.00 kW
SCOP	4.95	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.42 kW	11.87 kW
COP Tj = -7°C	4.05	2.81
Cdh	0.99	0.99
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh	0.99	0.99
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh	0.98	0.99
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh	0.97	0.97
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56

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

Pdh Tj = TOL	15.16 kW	13.95 kW
COP Tj = TOL	3.63	2.56
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	6266 kWh	8259 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	191 %	148 %
Prated	15.00 kW	15.00 kW
SCOP	4.78	3.70
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	15.16 kW	13.36 kW
COP Tj = +2°C	3.63	2.58



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

Cdh	0.99	0.99
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh	0.99	0.99
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh	0.98	0.98
Pdh Tj = Tbiv	15.16 kW	13.36 kW
COP Tj = Tbiv	3.63	2.58
Pdh Tj = TOL	15.16 kW	13.36 kW
COP Tj = TOL	3.63	2.58
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	4191 kWh	5340 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>
$\eta_s$	197 %	130 %
Prated	15.00 kW	15.00 kW
SCOP	4.92	3.24
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	9.89 kW	9.46 kW
COP Tj = -7°C	4.56	3.73
Cdh	0.99	0.99
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh	0.98	0.99
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh	0.98	0.98
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh	0.97	0.97
Pdh Tj = Tbiv	9.67 kW	9.71 kW
COP Tj = Tbiv	4.75	3.40

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

Pdh Tj = TOL	15.16 kW	13.95 kW
COP Tj = TOL	3.63	2.56
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	7515 kWh	11094 kWh
Pdh Tj = -15°C (if TOL<-20°C)	13.30	12.58
COP Tj = -15°C (if TOL<-20°C)	4.16	3.14
Cdh	0.99	0.99

## Model: ECOGEO B4 3-12kW

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91
Indoor water flow rate	1.23 m <sup>3</sup> /h	0.72 m <sup>3</sup> /h

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	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 17 Dec 2020

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	198 %	146 %
Prated	15.00 kW	15.00 kW
SCOP	4.95	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.42 kW	11.87 kW
COP Tj = -7°C	4.05	2.81
Cdh	0.99	0.99
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh	0.99	0.99
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh	0.98	0.99
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh	0.97	0.97
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56

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

Pdh Tj = TOL	15.16 kW	13.95 kW
COP Tj = TOL	3.63	2.56
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	6266 kWh	8259 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	191 %	148 %
Prated	15.00 kW	15.00 kW
SCOP	4.78	3.70
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	15.16 kW	13.36 kW
COP Tj = +2°C	3.63	2.58

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

Cdh	0.99	0.99
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh	0.99	0.99
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh	0.98	0.98
Pdh Tj = Tbiv	15.16 kW	13.36 kW
COP Tj = Tbiv	3.63	2.58
Pdh Tj = TOL	15.16 kW	13.36 kW
COP Tj = TOL	3.63	2.58
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	4191 kWh	5340 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>
$\eta_s$	197 %	130 %
Prated	15.00 kW	15.00 kW
SCOP	4.92	3.24
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	9.89 kW	9.46 kW
COP Tj = -7°C	4.56	3.73
Cdh	0.99	0.99
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh	0.98	0.99
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh	0.98	0.98
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh	0.97	0.97
Pdh Tj = Tbiv	9.67 kW	9.71 kW
COP Tj = Tbiv	4.75	3.40



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

Pdh Tj = TOL	15.16 kW	13.95 kW
COP Tj = TOL	3.63	2.56
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	6.00 kW	6.00 kW
Annual energy consumption Qhe	7515 kWh	11094 kWh
Pdh Tj = -15°C (if TOL<-20°C)	13.30	12.58
COP Tj = -15°C (if TOL<-20°C)	4.16	3.14
Cdh	0.99	0.99