

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			
Name of testing laboratory	AIT Austrian Institute of Technology GmbH			
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	
СОР	4.52	2.83	
Indoor water flow rate	0.69 m³/h	0.51 m³/h	

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

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





EN 14825		
	Low temperature	Medium temperature
η <sub>s</sub>	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





Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	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

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	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





Cdh	0.99	0.99
Pdh Tj = $+7^{\circ}$ 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	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	0 W	o 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

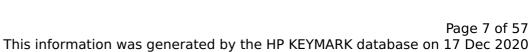
# Colder Climate





## EN 14825

	Low temperature	Medium temperature
$\eta_{s}$	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	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20



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Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	С
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)

CEN heat pump KEYMARK



## Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	78 %	
СОР	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 I	

## Colder Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	78 %	
СОР	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	



# **Model: ECOGEO C4 T 1-9kW**

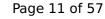
General Data	
Power supply	3x400V 50Hz
Off-peak product	Yes

# Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
El input	0.91 kW	1.70 kW
СОР	4.52	2.83
Indoor water flow rate	0.69 m³/h	0.51 m³/h

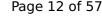
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

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





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	0.99	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





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Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	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

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	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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## This information was generated by the HP KEYMARK database on 17 Dec 2020

Cdh	0.99	0.99
Pdh Tj = $+7^{\circ}$ 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	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	0 W	o 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





## EN 14825

	Low temperature	Medium temperature
$\eta_{s}$	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	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20



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10.85 kW	10.06 kW	
3.52	2.38	
60 °C	60 °C	
11 W	11 W	
11 W	11 W	
11 W	11 W	
o w	o w	
Electricity	С	
4.00 kW	4.00 kW	
5522 kWh	8260 kWh	
9.90	9.31	
4.20	3.09	
0.99	0.99	
	10.85 kW  3.52  60 °C  11 W  11 W  0 W  Electricity  4.00 kW  5522 kWh  9.90  4.20	

Domestic Hot Water (DHW)

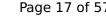


EN 16147	
Declared load profile	L
Efficiency ηDHW	78 %
СОР	2.07
Heating up time	01:43:10 h:min
Standby power input	88.2 W
Reference hot water temperature	58.9 °C
Mixed water at 40°C	227

## Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	78 %	
СОР	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 I	

# Colder Climate





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	78 %	
СОР	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	



# **Model: ECOGEO B3 T 1-9kW**

General Data	
Power supply	3x400V 50Hz

# Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
El input	0.91 kW	1.70 kW
СОР	4.52	2.83
Indoor water flow rate	0.69 m³/h	0.51 m³/h

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

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





## 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	0.99	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



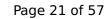


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Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	4699 kWh	6418 kWh

## Warmer Climate

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	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	0.99	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	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
РСК	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW

# Colder Climate

Annual energy consumption Qhe

3062 kWh

4033 kWh





## EN 14825

	Low temperature	Medium temperature
$\eta_s$	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	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20



# $$\operatorname{\textit{Page}}\xspace$ 23 of 57 This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	С
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 B4 T 1-9kW**

General Data	
Power supply 3x400V 50Hz	

# Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
El input	0.91 kW	1.70 kW
СОР	4.52	2.83
Indoor water flow rate	0.69 m³/h	0.51 m³/h

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

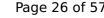
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	54 dB(A)	54 dB(A)





## 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	0.99	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



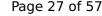


# $$\operatorname{\textit{Page}}\xspace$ 26 of 57 This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	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

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	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	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	7.62 kW	7.21 kW
$COP Tj = +7^{\circ}C$	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	10.85 kW	10.06 kW
COP Tj = TOL	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

# Colder Climate





## EN 14825

	Low temperature	Medium temperature
$\eta_s$	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	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20



 $$\operatorname{\textit{Page}}\xspace$  29 of 57 This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	С
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 C3 1-9kW**

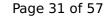
General Data		
Power supply	1x230V 50Hz	
Off-peak product	Yes	

# Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
El input	0.91 kW	1.70 kW
СОР	4.52	2.83
Indoor water flow rate	0.69 m³/h	0.51 m³/h

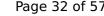
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Starting and operating test	passed	

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





	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	0.99	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





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Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	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

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	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



	,	
Cdh	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	7.62 kW	7.21 kW
$COP Tj = +7^{\circ}C$	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	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	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





## EN 14825

	Low temperature	Medium temperature
$\eta_{s}$	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	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20



	·	
Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	С
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)

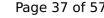


EN 16147		
Declared load profile	L	
Efficiency ηDHW	78 %	
СОР	2.07	
Heating up time	01:43:10 h:min	
Standby power input	88.2 W	
Reference hot water temperature	58.9 °C	
Mixed water at 40°C	227	

## Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	78 %	
СОР	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 I	

# Colder Climate





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	78 %	
СОР	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	



# **Model: ECOGEO C4 1-9kW**

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

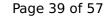
## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.12 kW	4.80 kW
El input	0.91 kW	1.70 kW
СОР	4.52	2.83
Indoor water flow rate	0.69 m³/h	0.51 m³/h

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

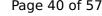
# Average Climate

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





EN 14825		
	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	0.99	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



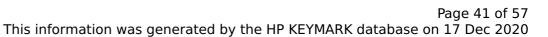


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Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	4699 kWh	6418 kWh

### Warmer Climate

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	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





Cdh	0.99	0.99
Pdh Tj = $+7^{\circ}$ 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	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	0 W	o 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





#### EN 14825

	Low temperature	Medium temperature
$\eta_{s}$	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	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20



This information was generated by the fir RETHAMING database on 17 Dec 202		
10.85 kW	10.06 kW	
3.52	2.38	
60 °C	60 °C	
11 W	11 W	
11 W	11 W	
11 W	11 W	
o w	o w	
Electricity	С	
4.00 kW	4.00 kW	
5522 kWh	8260 kWh	
9.90	9.31	
4.20	3.09	
0.99	0.99	
	10.85 kW  3.52  60 °C  11 W  11 W  0 W  Electricity  4.00 kW  5522 kWh  9.90  4.20	

Domestic Hot Water (DHW)

**Average Climate** 

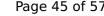


EN 16147	
Declared load profile	L
Efficiency ηDHW	78 %
СОР	2.07
Heating up time	01:43:10 h:min
Standby power input	88.2 W
Reference hot water temperature	58.9 °C
Mixed water at 40°C	227

### Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	78 %	
СОР	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 I	

# Colder Climate





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	78 %	
СОР	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	



# **Model: ECOGEO B3 1-9kW**

General Data	
Power supply	1x230V 50Hz

# Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	4.12 kW	4.80 kW	
El input	0.91 kW	1.70 kW	
СОР	4.52	2.83	
Indoor water flow rate	0.69 m³/h	0.51 m³/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

	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	0.99	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





Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	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

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	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





Cdh	0.99	0.99
Pdh Tj = +7°C	7.62 kW	7.21 kW
$COP Tj = +7^{\circ}C$	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	10.85 kW	10.06 kW
COP Tj = TOL	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	o 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





#### EN 14825

	Low temperature	Medium temperature
$\eta_{s}$	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	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20



Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	С
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 B4 1-9kW**

General Data		
Power supply	1x230V 50Hz	

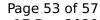
# Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	4.12 kW	4.80 kW	
El input	0.91 kW	1.70 kW	
СОР	4.52	2.83	
Indoor water flow rate	0.69 m³/h	0.51 m³/h	

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

## **Average Climate**

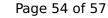
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	54 dB(A)	54 dB(A)





#### EN 14825

	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	0.99	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

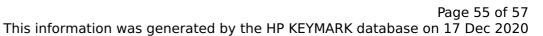




Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.00 kW
Annual energy consumption Qhe	4699 kWh	6418 kWh

## Warmer Climate

EN 14825			
	Low temperature	Medium temperature	
$\eta_{s}$	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	





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	10.85 kW	10.06 kW
COP Tj = TOL	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

# Colder Climate





#### EN 14825

	Low temperature	Medium temperature
$\eta_{s}$	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	7.59 kW	7.56 kW
COP Tj = Tbiv	4.53	3.20



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	•	
Pdh Tj = TOL	10.85 kW	10.06 kW
COP Tj = TOL	3.52	2.38
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	С
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