

This information was generated by the HP KEYMARK database on 18 Mar 2022

[Login](#)

Summary of	ECOGEO B/C 3 5-22kW	Reg. No.	011-1W0331
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 5-22kW		
Heat Pump Type	Brine/Water		
Refrigerant	R410A		
Mass of Refrigerant	1.5 kg		
Certification Date	28.05.2019		

Model: ECOGEO C3 T 5-22kW

Configure model

Model name	ECOGEO C3 T 5-22kW
Application	Heating + DHW + low temp
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data

Power supply	3x400V 50Hz
Off-peak product	Yes

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.60 kW	7.91 kW
El input	1.76 kW	2.62 kW
COP	4.88	3.02

EN 14511-4

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

Average Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	188 %	150 %
Prated	23.00 kW	20.00 kW
SCOP	4.71	3.75
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.07 kW	17.41 kW
COP Tj = -7°C	3.27	2.67
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	12.97 kW	10.69 kW
COP Tj = +2°C	4.86	3.60
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	8.50 kW	7.08 kW
COP Tj = +7°C	5.52	4.99
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.79 kW	3.76 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	5.19	4.38
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	10084 kWh	10840 kWh

Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_s	187 %	148 %
Prated	23.00 kW	20.00 kW
SCOP	4.68	3.70

This information was generated by the HP KEYMARK database on 18 Mar 2022

Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	24.76 kW	19.09 kW
COP Tj = +2°C	3.77	2.90
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	14.91 kW	12.89 kW
COP Tj = +7°C	4.20	3.21
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.56 kW	5.72 kW
COP Tj = 12°C	5.33	4.36
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

This information was generated by the HP KEYMARK database on 18 Mar 2022

Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Q _{he}	6572 kWh	7117 kWh

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_s	193 %	129 %
Prated	23.00 kW	20.00 kW
SCOP	4.82	3.22
T _{biv}	-10 °C	-10 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	13.83 kW	11.90 kW
COP T _j = -7°C	4.39	3.71
C _{dh} T _j = -7 °C	0.99	0.99
P _{dh} T _j = +2°C	8.55 kW	7.38 kW
COP T _j = +2°C	5.18	4.66
C _{dh} T _j = +2 °C	0.99	0.99
P _{dh} T _j = +7°C	5.62 kW	4.80 kW
COP T _j = +7°C	5.38	5.24
C _{dh} T _j = +7 °C	0.99	0.99
P _{dh} T _j = 12°C	3.57 kW	3.55 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	4.94	5.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.54 kW	13.79 kW
COP Tj = Tbiv	4.96	3.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	11764 kWh	15103 kWh
Pdh Tj = -15°C (if TOL<-20°C)	18.78	16.54
COP Tj = -15°C (if TOL<-20°C)	4.06	3.09
Cdh Tj = -15 °C	0.99	0.99

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	100 %
COP	1.68
Heating up time	00:56:51 h:min
Standby power input	162.8 W
Reference hot water temperature	57.5 °C
Mixed water at 40°C	233 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	100 %
COP	1.68
Heating up time	00:56:51 h:min
Standby power input	162.8 W
Reference hot water temperature	57.5 °C
Mixed water at 40°C	233 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	100 %
COP	1.68
Heating up time	00:56:51 h:min
Standby power input	162.8 W
Reference hot water temperature	57.5 °C
Mixed water at 40°C	233 l

Model: ECOGEO C4 T 5-22kW

Configure model	
Model name	ECOGEO C4 T 5-22kW
Application	Heating + DHW + low temp
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

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

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.60 kW	7.91 kW
El input	1.76 kW	2.62 kW
COP	4.88	3.02

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

Average Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	188 %	150 %
Prated	23.00 kW	20.00 kW
SCOP	4.71	3.75
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.07 kW	17.41 kW
COP Tj = -7°C	3.27	2.67
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	12.97 kW	10.69 kW
COP Tj = +2°C	4.86	3.60
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	8.50 kW	7.08 kW
COP Tj = +7°C	5.52	4.99
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.79 kW	3.76 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	5.19	4.38
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	10084 kWh	10840 kWh

Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_s	187 %	148 %
Prated	23.00 kW	20.00 kW
SCOP	4.68	3.70

This information was generated by the HP KEYMARK database on 18 Mar 2022

Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	24.76 kW	19.09 kW
COP Tj = +2°C	3.77	2.90
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	14.91 kW	12.89 kW
COP Tj = +7°C	4.20	3.21
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.56 kW	5.72 kW
COP Tj = 12°C	5.33	4.36
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

This information was generated by the HP KEYMARK database on 18 Mar 2022

Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Q _{he}	6572 kWh	7117 kWh

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_s	193 %	129 %
Prated	23.00 kW	20.00 kW
SCOP	4.82	3.22
T _{biv}	-10 °C	-10 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	13.83 kW	11.90 kW
COP T _j = -7°C	4.39	3.71
C _{dh} T _j = -7 °C	0.99	0.99
P _{dh} T _j = +2°C	8.55 kW	7.38 kW
COP T _j = +2°C	5.18	4.66
C _{dh} T _j = +2 °C	0.99	0.99
P _{dh} T _j = +7°C	5.62 kW	4.80 kW
COP T _j = +7°C	5.38	5.24
C _{dh} T _j = +7 °C	0.99	0.99
P _{dh} T _j = 12°C	3.57 kW	3.55 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	4.94	5.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.54 kW	13.79 kW
COP Tj = Tbiv	4.96	3.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	11764 kWh	15103 kWh
Pdh Tj = -15°C (if TOL<-20°C)	18.78	16.54
COP Tj = -15°C (if TOL<-20°C)	4.06	3.09
Cdh Tj = -15 °C	0.99	0.99

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	100 %
COP	1.68
Heating up time	00:56:51 h:min
Standby power input	162.8 W
Reference hot water temperature	57.5 °C
Mixed water at 40°C	233 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	100 %
COP	1.68
Heating up time	00:56:51 h:min
Standby power input	162.8 W
Reference hot water temperature	57.5 °C
Mixed water at 40°C	233 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	100 %
COP	1.68
Heating up time	00:56:51 h:min
Standby power input	162.8 W
Reference hot water temperature	57.5 °C
Mixed water at 40°C	233 l

Model: ECOGEO B3 T 5-22kW

Configure model	
Model name	ECOGEO B3 T 5-22kW
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.60 kW	7.91 kW
El input	1.76 kW	2.62 kW
COP	4.88	3.02

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

Average Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	188 %	150 %
Prated	23.00 kW	20.00 kW
SCOP	4.71	3.75
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.07 kW	17.41 kW
COP Tj = -7°C	3.27	2.67
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	12.97 kW	10.69 kW
COP Tj = +2°C	4.86	3.60
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	8.50 kW	7.08 kW
COP Tj = +7°C	5.52	4.99
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.79 kW	3.76 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	5.19	4.38
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	10084 kWh	10840 kWh

Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_s	187 %	148 %
Prated	23.00 kW	20.00 kW
SCOP	4.68	3.70

This information was generated by the HP KEYMARK database on 18 Mar 2022

Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	24.76 kW	19.09 kW
COP Tj = +2°C	3.77	2.90
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	14.91 kW	12.89 kW
COP Tj = +7°C	4.20	3.21
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.56 kW	5.72 kW
COP Tj = 12°C	5.33	4.36
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

This information was generated by the HP KEYMARK database on 18 Mar 2022

Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Q _{he}	6572 kWh	7117 kWh

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_s	193 %	129 %
Prated	23.00 kW	20.00 kW
SCOP	4.82	3.22
T _{biv}	-10 °C	-10 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	13.83 kW	11.90 kW
COP T _j = -7°C	4.39	3.71
C _{dh} T _j = -7 °C	0.99	0.99
P _{dh} T _j = +2°C	8.55 kW	7.38 kW
COP T _j = +2°C	5.18	4.66
C _{dh} T _j = +2 °C	0.99	0.99
P _{dh} T _j = +7°C	5.62 kW	4.80 kW
COP T _j = +7°C	5.38	5.24
C _{dh} T _j = +7 °C	0.99	0.99
P _{dh} T _j = 12°C	3.57 kW	3.55 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	4.94	5.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.54 kW	13.79 kW
COP Tj = Tbiv	4.96	3.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	11764 kWh	15103 kWh
Pdh Tj = -15°C (if TOL<-20°C)	18.78	16.54
COP Tj = -15°C (if TOL<-20°C)	4.06	3.09
Cdh Tj = -15 °C	0.99	0.99

Model: ECOGEO B4 5-22kW

Configure model	
Model name	ECOGEO B4 5-22kW
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.60 kW	7.91 kW
El input	1.76 kW	2.62 kW
COP	4.88	3.02

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

Average Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	188 %	150 %
Prated	23.00 kW	20.00 kW
SCOP	4.71	3.75
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.07 kW	17.41 kW
COP Tj = -7°C	3.27	2.67
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	12.97 kW	10.69 kW
COP Tj = +2°C	4.86	3.60
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	8.50 kW	7.08 kW
COP Tj = +7°C	5.52	4.99
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.79 kW	3.76 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	5.19	4.38
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	10084 kWh	10840 kWh

Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_s	187 %	148 %
Prated	23.00 kW	20.00 kW
SCOP	4.68	3.70

This information was generated by the HP KEYMARK database on 18 Mar 2022

Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	24.76 kW	19.09 kW
COP Tj = +2°C	3.77	2.90
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	14.91 kW	12.89 kW
COP Tj = +7°C	4.20	3.21
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.56 kW	5.72 kW
COP Tj = 12°C	5.33	4.36
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

This information was generated by the HP KEYMARK database on 18 Mar 2022

Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Q _{he}	6572 kWh	7117 kWh

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_s	193 %	129 %
Prated	23.00 kW	20.00 kW
SCOP	4.82	3.22
T _{biv}	-10 °C	-10 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	13.83 kW	11.90 kW
COP T _j = -7°C	4.39	3.71
C _{dh} T _j = -7 °C	0.99	0.99
P _{dh} T _j = +2°C	8.55 kW	7.38 kW
COP T _j = +2°C	5.18	4.66
C _{dh} T _j = +2 °C	0.99	0.99
P _{dh} T _j = +7°C	5.62 kW	4.80 kW
COP T _j = +7°C	5.38	5.24
C _{dh} T _j = +7 °C	0.99	0.99
P _{dh} T _j = 12°C	3.57 kW	3.55 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	4.94	5.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.54 kW	13.79 kW
COP Tj = Tbiv	4.96	3.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	11764 kWh	15103 kWh
Pdh Tj = -15°C (if TOL<-20°C)	18.78	16.54
COP Tj = -15°C (if TOL<-20°C)	4.06	3.09
Cdh Tj = -15 °C	0.99	0.99

Model: ECOGEO C3 5-22kW

Configure model

Model name	ECOGEO C3 5-22kW
Application	Heating + DHW + low temp
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data

Power supply	1x230V 50Hz
Off-peak product	Yes

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	8.60 kW	7.91 kW
El input	1.76 kW	2.62 kW
COP	4.88	3.02

EN 14511-4

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

Average Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	188 %	150 %
Prated	23.00 kW	20.00 kW
SCOP	4.71	3.75
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.07 kW	17.41 kW
COP Tj = -7°C	3.27	2.67
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	12.97 kW	10.69 kW
COP Tj = +2°C	4.86	3.60
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	8.50 kW	7.08 kW
COP Tj = +7°C	5.52	4.99
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.79 kW	3.76 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	5.19	4.38
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	10084 kWh	10840 kWh

Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_s	187 %	148 %
Prated	23.00 kW	20.00 kW
SCOP	4.68	3.70

This information was generated by the HP KEYMARK database on 18 Mar 2022

Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	24.76 kW	19.09 kW
COP Tj = +2°C	3.77	2.90
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	14.91 kW	12.89 kW
COP Tj = +7°C	4.20	3.21
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.56 kW	5.72 kW
COP Tj = 12°C	5.33	4.36
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

This information was generated by the HP KEYMARK database on 18 Mar 2022

Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Q _{he}	6572 kWh	7117 kWh

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_s	193 %	129 %
Prated	23.00 kW	20.00 kW
SCOP	4.82	3.22
T _{biv}	-10 °C	-10 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	13.83 kW	11.90 kW
COP T _j = -7°C	4.39	3.71
C _{dh} T _j = -7 °C	0.99	0.99
P _{dh} T _j = +2°C	8.55 kW	7.38 kW
COP T _j = +2°C	5.18	4.66
C _{dh} T _j = +2 °C	0.99	0.99
P _{dh} T _j = +7°C	5.62 kW	4.80 kW
COP T _j = +7°C	5.38	5.24
C _{dh} T _j = +7 °C	0.99	0.99
P _{dh} T _j = 12°C	3.57 kW	3.55 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	4.94	5.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.54 kW	13.79 kW
COP Tj = Tbiv	4.96	3.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	11764 kWh	15103 kWh
Pdh Tj = -15°C (if TOL<-20°C)	18.78	16.54
COP Tj = -15°C (if TOL<-20°C)	4.06	3.09
Cdh Tj = -15 °C	0.99	0.99

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	100 %
COP	1.68
Heating up time	00:56:51 h:min
Standby power input	162.8 W
Reference hot water temperature	57.5 °C
Mixed water at 40°C	233 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	100 %
COP	1.68
Heating up time	00:56:51 h:min
Standby power input	162.8 W
Reference hot water temperature	57.5 °C
Mixed water at 40°C	233 l

Colder Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	100 %
COP	1.68
Heating up time	00:56:51 h:min
Standby power input	162.8 W
Reference hot water temperature	57.5 °C
Mixed water at 40°C	233 l

Model: ECOGEO C4 5-22kW

Configure model	
Model name	ECOGEO C4 5-22kW
Application	Heating + DHW + low temp
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

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

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.60 kW	7.91 kW
El input	1.76 kW	2.62 kW
COP	4.88	3.02

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

Average Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	188 %	150 %
Prated	23.00 kW	20.00 kW
SCOP	4.71	3.75
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.07 kW	17.41 kW
COP Tj = -7°C	3.27	2.67
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	12.97 kW	10.69 kW
COP Tj = +2°C	4.86	3.60
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	8.50 kW	7.08 kW
COP Tj = +7°C	5.52	4.99
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.79 kW	3.76 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	5.19	4.38
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	10084 kWh	10840 kWh

Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_s	187 %	148 %
Prated	23.00 kW	20.00 kW
SCOP	4.68	3.70

This information was generated by the HP KEYMARK database on 18 Mar 2022

Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	24.76 kW	19.09 kW
COP Tj = +2°C	3.77	2.90
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	14.91 kW	12.89 kW
COP Tj = +7°C	4.20	3.21
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.56 kW	5.72 kW
COP Tj = 12°C	5.33	4.36
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

This information was generated by the HP KEYMARK database on 18 Mar 2022

Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Q _{he}	6572 kWh	7117 kWh

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_s	193 %	129 %
Prated	23.00 kW	20.00 kW
SCOP	4.82	3.22
T _{biv}	-10 °C	-10 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	13.83 kW	11.90 kW
COP T _j = -7°C	4.39	3.71
C _{dh} T _j = -7 °C	0.99	0.99
P _{dh} T _j = +2°C	8.55 kW	7.38 kW
COP T _j = +2°C	5.18	4.66
C _{dh} T _j = +2 °C	0.99	0.99
P _{dh} T _j = +7°C	5.62 kW	4.80 kW
COP T _j = +7°C	5.38	5.24
C _{dh} T _j = +7 °C	0.99	0.99
P _{dh} T _j = 12°C	3.57 kW	3.55 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	4.94	5.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.54 kW	13.79 kW
COP Tj = Tbiv	4.96	3.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	11764 kWh	15103 kWh
Pdh Tj = -15°C (if TOL<-20°C)	18.78	16.54
COP Tj = -15°C (if TOL<-20°C)	4.06	3.09
Cdh Tj = -15 °C	0.99	0.99

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	100 %
COP	1.68
Heating up time	00:56:51 h:min
Standby power input	162.8 W
Reference hot water temperature	57.5 °C
Mixed water at 40°C	233 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	100 %
COP	1.68
Heating up time	00:56:51 h:min
Standby power input	162.8 W
Reference hot water temperature	57.5 °C
Mixed water at 40°C	233 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	100 %
COP	1.68
Heating up time	00:56:51 h:min
Standby power input	162.8 W
Reference hot water temperature	57.5 °C
Mixed water at 40°C	233 l

Model: ECOGEO B3 5-22kW

Configure model	
Model name	ECOGEO B3 5-22kW
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.60 kW	7.91 kW
El input	1.76 kW	2.62 kW
COP	4.88	3.02

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

Average Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	188 %	150 %
Prated	23.00 kW	20.00 kW
SCOP	4.71	3.75
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.07 kW	17.41 kW
COP Tj = -7°C	3.27	2.67
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	12.97 kW	10.69 kW
COP Tj = +2°C	4.86	3.60
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	8.50 kW	7.08 kW
COP Tj = +7°C	5.52	4.99
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.79 kW	3.76 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	5.19	4.38
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	10084 kWh	10840 kWh

Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_s	187 %	148 %
Prated	23.00 kW	20.00 kW
SCOP	4.68	3.70

This information was generated by the HP KEYMARK database on 18 Mar 2022

Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	24.76 kW	19.09 kW
COP Tj = +2°C	3.77	2.90
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	14.91 kW	12.89 kW
COP Tj = +7°C	4.20	3.21
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.56 kW	5.72 kW
COP Tj = 12°C	5.33	4.36
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

This information was generated by the HP KEYMARK database on 18 Mar 2022

Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Q _{he}	6572 kWh	7117 kWh

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_s	193 %	129 %
Prated	23.00 kW	20.00 kW
SCOP	4.82	3.22
T _{biv}	-10 °C	-10 °C
TOL	-22 °C	-22 °C
P _{d,h} T _j = -7°C	13.83 kW	11.90 kW
COP T _j = -7°C	4.39	3.71
C _{d,h} T _j = -7 °C	0.99	0.99
P _{d,h} T _j = +2°C	8.55 kW	7.38 kW
COP T _j = +2°C	5.18	4.66
C _{d,h} T _j = +2 °C	0.99	0.99
P _{d,h} T _j = +7°C	5.62 kW	4.80 kW
COP T _j = +7°C	5.38	5.24
C _{d,h} T _j = +7 °C	0.99	0.99
P _{d,h} T _j = 12°C	3.57 kW	3.55 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	4.94	5.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.54 kW	13.79 kW
COP Tj = Tbiv	4.96	3.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	11764 kWh	15103 kWh
Pdh Tj = -15°C (if TOL<-20°C)	18.78	16.54
COP Tj = -15°C (if TOL<-20°C)	4.06	3.09
Cdh Tj = -15 °C	0.99	0.99

Model: ECOGEOB4 5-22kW

Configure model	
Model name	ECOGEOB4 5-22kW
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.60 kW	7.91 kW
El input	1.76 kW	2.62 kW
COP	4.88	3.02

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

Average Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	188 %	150 %
Prated	23.00 kW	20.00 kW
SCOP	4.71	3.75
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.07 kW	17.41 kW
COP Tj = -7°C	3.27	2.67
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	12.97 kW	10.69 kW
COP Tj = +2°C	4.86	3.60
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	8.50 kW	7.08 kW
COP Tj = +7°C	5.52	4.99
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.79 kW	3.76 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	5.19	4.38
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	10084 kWh	10840 kWh

Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_s	187 %	148 %
Prated	23.00 kW	20.00 kW
SCOP	4.68	3.70

This information was generated by the HP KEYMARK database on 18 Mar 2022

Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	24.76 kW	19.09 kW
COP Tj = +2°C	3.77	2.90
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	14.91 kW	12.89 kW
COP Tj = +7°C	4.20	3.21
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.56 kW	5.72 kW
COP Tj = 12°C	5.33	4.36
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	24.76 kW	19.09 kW
COP Tj = Tbiv	3.77	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

This information was generated by the HP KEYMARK database on 18 Mar 2022

Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Q _{he}	6572 kWh	7117 kWh

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_s	193 %	129 %
Prated	23.00 kW	20.00 kW
SCOP	4.82	3.22
T _{biv}	-10 °C	-10 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	13.83 kW	11.90 kW
COP T _j = -7°C	4.39	3.71
C _{dh} T _j = -7 °C	0.99	0.99
P _{dh} T _j = +2°C	8.55 kW	7.38 kW
COP T _j = +2°C	5.18	4.66
C _{dh} T _j = +2 °C	0.99	0.99
P _{dh} T _j = +7°C	5.62 kW	4.80 kW
COP T _j = +7°C	5.38	5.24
C _{dh} T _j = +7 °C	0.99	0.99
P _{dh} T _j = 12°C	3.57 kW	3.55 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	4.94	5.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.54 kW	13.79 kW
COP Tj = Tbiv	4.96	3.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	24.76 kW	19.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.90
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	7 W	7 W
PSB	6 W	6 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	11764 kWh	15103 kWh
Pdh Tj = -15°C (if TOL<-20°C)	18.78	16.54
COP Tj = -15°C (if TOL<-20°C)	4.06	3.09
Cdh Tj = -15 °C	0.99	0.99