Login

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		
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 C3T 3-12kW

Configure model	
Model name	ecoGEO C3T 3-12kW
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	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91

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

Warmer Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	140 %
Prated	15.00 kW	14.55 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
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	15.16 kW	13.95 kW

COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	4192 kWh	5256 kWh

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	188 %	163 %

Prated	15.00 kW	14.55 kW
SCOP	4.89	4.27
Tbiv	-22 °C	-22 °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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		

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	0.00 kW	0.00 kW
Annual energy consumption Qhe	7564 kWh	8397 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 Tj = -15 °C	0.99	0.99

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**
η_s	190 %	138 %
Prated	15.00 kW	14.55 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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	6266 kWh	8231 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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 C4T 3-12kW

Configure model	
Model name	ecoGEO C4T 3-12kW
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	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91

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

Warmer Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	140 %
Prated	15.00 kW	14.55 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
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	15.16 kW	13.95 kW

COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	4192 kWh	5256 kWh

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	188 %	163 %

Prated	15.00 kW	14.55 kW
SCOP	4.89	4.27
Tbiv	-22 °C	-22 °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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		

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	0.00 kW	0.00 kW
Annual energy consumption Qhe	7564 kWh	8397 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 Tj = -15 °C	0.99	0.99

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**
η_s	190 %	138 %
Prated	15.00 kW	14.55 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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	6266 kWh	8231 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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 C3 3-12kW

Configure model	
Model name	ecoGEO C3 3-12kW
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	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91

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

Warmer Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	140 %
Prated	15.00 kW	14.55 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
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	15.16 kW	13.95 kW

COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	4192 kWh	5256 kWh

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	188 %	163 %

Prated	15.00 kW	14.55 kW
SCOP	4.89	4.27
Tbiv	-22 °C	-22 °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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		

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	0.00 kW	0.00 kW
Annual energy consumption Qhe	7564 kWh	8397 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 Tj = -15 °C	0.99	0.99

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**
η_s	190 %	138 %
Prated	15.00 kW	14.55 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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	6266 kWh	8231 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Configure model	
Model name	ecoGEO C4 3-12kW
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	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91

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

Warmer Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	140 %
Prated	15.00 kW	14.55 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
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	15.16 kW	13.95 kW

COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	4192 kWh	5256 kWh

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	188 %	163 %

Prated	15.00 kW	14.55 kW
SCOP	4.89	4.27
Tbiv	-22 °C	-22 °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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		

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	0.00 kW	0.00 kW
Annual energy consumption Qhe	7564 kWh	8397 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 Tj = -15 °C	0.99	0.99

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**
η_s	190 %	138 %
Prated	15.00 kW	14.55 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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	6266 kWh	8231 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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 B3T 3-12kW

Configure model	
Model name	ecoGEO B3T 3-12kW
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	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91

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

Warmer Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	140 %
Prated	15.00 kW	14.55 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
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	15.16 kW	13.95 kW

COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	4192 kWh	5256 kWh

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	188 %	163 %

Prated	15.00 kW	14.55 kW
SCOP	4.89	4.27
Tbiv	-22 °C	-22 °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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		

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	0.00 kW	0.00 kW
Annual energy consumption Qhe	7564 kWh	8397 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 Tj = -15 °C	0.99	0.99

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**
η_s	190 %	138 %
Prated	15.00 kW	14.55 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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	6266 kWh	8231 kWh

Model: ecoGEO B4T 3-12kW

Configure model	
Model name	ecoGEO B4T 3-12kW
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	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91

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

Warmer Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	140 %
Prated	15.00 kW	14.55 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
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	15.16 kW	13.95 kW

COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	4192 kWh	5256 kWh

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	188 %	163 %

Prated	15.00 kW	14.55 kW
SCOP	4.89	4.27
Tbiv	-22 °C	-22 °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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		

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	0.00 kW	0.00 kW
Annual energy consumption Qhe	7564 kWh	8397 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 Tj = -15 °C	0.99	0.99

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**
η_s	190 %	138 %
Prated	15.00 kW	14.55 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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	6266 kWh	8231 kWh

Model: ecoGEO B3 3-12kW

Configure model	
Model name	ecoGEO B3 3-12kW
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	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91

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

Warmer Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	140 %
Prated	15.00 kW	14.55 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
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	15.16 kW	13.95 kW

COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	4192 kWh	5256 kWh

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	188 %	163 %

Prated	15.00 kW	14.55 kW
SCOP	4.89	4.27
Tbiv	-22 °C	-22 °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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		

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	0.00 kW	0.00 kW
Annual energy consumption Qhe	7564 kWh	8397 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 Tj = -15 °C	0.99	0.99

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**
η_s	190 %	138 %
Prated	15.00 kW	14.55 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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	6266 kWh	8231 kWh

Model: ecoGEO B4 3-12kW

Configure model	
Model name	ecoGEO B4 3-12kW
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	7.30 kW	6.65 kW
El input	1.60 kW	2.28 kW
COP	4.55	2.91

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

Warmer Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	140 %
Prated	15.00 kW	14.55 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
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	10.48 kW	9.98 kW
COP Tj = +7°C	4.38	3.24
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.67 kW	4.61 kW
COP Tj = 12°C	5.50	4.48
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	15.16 kW	13.95 kW

COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	4192 kWh	5256 kWh

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	188 %	163 %

Prated	15.00 kW	14.55 kW
SCOP	4.89	4.27
Tbiv	-22 °C	-22 °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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.04 kW	5.90 kW
COP Tj = +2°C	5.34	4.78
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	3.86 kW	3.50 kW
COP Tj = +7°C	5.54	5.64
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.97 kW	1.99 kW
COP Tj = 12°C	4.64	5.99
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		

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	0.00 kW	0.00 kW
Annual energy consumption Qhe	7564 kWh	8397 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 Tj = -15 °C	0.99	0.99

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**
η_s	190 %	138 %
Prated	15.00 kW	14.55 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 Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	8.47 kW	8.48 kW
COP Tj = +2°C	5.01	3.62
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.34 kW	5.56 kW
COP Tj = +7°C	5.61	4.29
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	2.45 kW	2.47 kW
COP Tj = 12°C	5.18	4.38
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	15.16 kW	13.95 kW
COP Tj = Tbiv	3.63	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.16 kW	13.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.63	2.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	6266 kWh	8231 kWh