Login

Summary of	Thermia Calibra Eco 8	Reg. No.	012-C700110
Certificate Holder			
Name	Thermia		
Address	Snickaregatan 1	Zip	
City	Arvika	Country	Sweden
Certification Body	RISE CERT		
Subtype title	Thermia Calibra Eco 8		
Heat Pump Type	Brine/Water and Water/Water		
Refrigerant	R452B		
Mass of Refrigerant	0.9 kg		
Certification Date	25.08.2021		
Testing basis	EN 14511:2018, EN 14825:2018, EN 12102:2017		

Model: Thermia Calibra Eco 8 400V

Configure model	
Model name	Thermia Calibra Eco 8 400V
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Brine/Water Heat Pump

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.90 kW	6.21 kW
El input	1.06 kW	2.20 kW
COP	4.60	2.83

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	32 dB(A)	32 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	218 %	153 %
Prated	6.70 kW	6.24 kW
SCOP	5.65	4.01
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.70 kW	6.24 kW
COP Tj = +2°C	4.44	2.82
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	4.30 kW	4.01 kW
COP Tj = +7°C	5.47	3.61
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.54 kW	2.40 kW
COP Tj = 12°C	6.24	4.77
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.70 kW	6.24 kW

COP Tj = Tbiv	4.44	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.44	2.82
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 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	1583 kWh	2076 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	32 dB(A)	32 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	227 %	156 %
Prated	6.70 kW	6.24 kW

SCOP	5.87	4.10
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.05 kW	3.77 kW
COP Tj = -7°C	5.68	3.81
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.47 kW	2.30 kW
COP Tj = +2°C	6.28	4.38
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.54 kW	2.41 kW
COP Tj = +7°C	6.30	4.93
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.53 kW	2.44 kW
COP Tj = 12°C	6.17	5.17
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.70 kW	6.24 kW
COP Tj = Tbiv	4.44	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.44	2.82
WTOL	65 °C	65 °C
Poff	5 W	5 W

PTO	9 W	9 W
PSB	9 W	9 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	2810 kWh	3748 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	32 dB(A)	32 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	215 %	156 %
Prated	6.70 kW	6.24 kW
SCOP	5.57	4.10
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.92 kW	5.52 kW
COP Tj = -7°C	4.73	3.12

Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.61 kW	3.36 kW
COP Tj = +2°C	5.70	4.10
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.32 kW	2.16 kW
COP Tj = +7°C	5.96	4.80
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.54 kW	2.16 kW
COP Tj = 12°C	6.28	5.05
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.70 kW	6.24 kW
COP Tj = Tbiv	4.44	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.44	2.82
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	0 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	2485 kWh	3139 kWh

Water/Water Heat Pump

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	8.88 kW	8.39 kW
El input	1.53 kW	2.36 kW
COP	5.82	3.56

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	291 %	193 %
Prated	8.88 kW	8.39 kW

SCOP	7.49	5.02
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.88 kW	8.39 kW
COP Tj = +2°C	5.82	3.56
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	5.71 kW	5.39 kW
COP Tj = +7°C	7.44	4.59
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.28 kW	3.20 kW
COP Tj = 12°C	8.08	5.84
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.88 kW	8.39 kW
COP Tj = Tbiv	5.82	3.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.88 kW	8.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.82	3.56
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	9 W	9 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1585 kWh	2235 kWh

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	306 %	205 %
Prated	8.88 kW	8.39 kW
SCOP	7.86	5.32
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.38 kW	5.08 kW
COP Tj = -7°C	7.81	4.79
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.27 kW	3.09 kW
COP Tj = +2°C	8.34	5.96
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	3.28 kW	3.21 kW
COP Tj = +7°C	8.17	6.09
Cdh Tj = +7 °C	0.98	0.98

Pdh Tj = 12°C	3.28 kW	3.22 kW
COP Tj = 12°C	7.98	6.45
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.88 kW	8.39 kW
COP Tj = Tbiv	5.82	3.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.88 kW	8.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.82	3.56
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	0 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2785 kWh	3888 kWh

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	294 %	201 %
Prated	8.88 kW	8.39 kW

SCOP	7.56	5.23
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.86 kW	7.42 kW
COP Tj = -7°C	6.27	3.92
Cdh Tj = -7 °C	0.99	1.00
Pdh Tj = +2°C	4.78 kW	4.52 kW
COP Tj = +2°C	7.94	5.34
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.07 kW	3.20 kW
COP Tj = +7°C	8.00	5.84
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	3.28 kW	2.16 kW
COP Tj = 12°C	8.14	6.63
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.88 kW	8.39 kW
COP Tj = Tbiv	5.82	3.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.88 kW	8.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.82	3.56
WTOL	65 °C	65 °C
Poff	5 W	5 W

PTO	9 W	9 W
PSB	9 W	9 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	2428 kWh	3316 kWh

Model: Thermia Calibra Eco 8 Duo 400V

Configure model	
Model name	Thermia Calibra Eco 8 Duo 400V
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Brine/Water Heat Pump

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.90 kW	6.21 kW
El input	1.06 kW	2.20 kW
COP	4.60	2.83

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	218 %	153 %
Prated	6.70 kW	6.24 kW
SCOP	5.65	4.01
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.70 kW	6.24 kW
COP Tj = +2°C	4.44	2.82
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	4.30 kW	4.01 kW
COP Tj = +7°C	5.47	3.61
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.54 kW	2.40 kW
COP Tj = 12°C	6.24	4.77
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.70 kW	6.24 kW

COP Tj = Tbiv	4.44	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.44	2.82
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 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	1583 kWh	2076 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	227 %	156 %
Prated	6.70 kW	6.24 kW

SCOP	5.87	4.10
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.05 kW	3.77 kW
COP Tj = -7°C	5.68	3.81
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.47 kW	2.30 kW
COP Tj = +2°C	6.28	4.38
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.54 kW	2.41 kW
COP Tj = +7°C	6.30	4.93
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.53 kW	2.44 kW
COP Tj = 12°C	6.17	5.17
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.70 kW	6.24 kW
COP Tj = Tbiv	4.44	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.44	2.82
WTOL	65 °C	65 °C
Poff	5 W	5 W

PTO	9 W	9 W
PSB	9 W	9 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	2810 kWh	3748 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	215 %	156 %
Prated	6.70 kW	6.24 kW
SCOP	5.57	4.10
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.92 kW	5.52 kW
COP Tj = -7°C	4.73	3.12

Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.61 kW	3.36 kW
COP Tj = +2°C	5.70	4.10
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.32 kW	2.16 kW
COP Tj = +7°C	5.96	4.80
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.54 kW	2.16 kW
COP Tj = 12°C	6.28	5.05
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.70 kW	6.24 kW
COP Tj = Tbiv	4.44	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.44	2.82
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	0 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	2485 kWh	3139 kWh

Water/Water Heat Pump

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	8.88 kW	8.39 kW
El input	1.53 kW	2.36 kW
COP	5.82	3.56

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	291 %	193 %
Prated	8.88 kW	8.39 kW

SCOP	7.49	5.02
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.88 kW	8.39 kW
COP Tj = +2°C	5.82	3.56
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	5.71 kW	5.39 kW
COP Tj = +7°C	7.44	4.59
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.28 kW	3.20 kW
COP Tj = 12°C	8.08	5.84
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.88 kW	8.39 kW
COP Tj = Tbiv	5.82	3.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.88 kW	8.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.82	3.56
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	9 W	9 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1585 kWh	2235 kWh

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	306 %	205 %
Prated	8.88 kW	8.39 kW
SCOP	7.86	5.32
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.38 kW	5.08 kW
COP Tj = -7°C	7.81	4.79
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.27 kW	3.09 kW
COP Tj = +2°C	8.34	5.96
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	3.28 kW	3.21 kW
COP Tj = +7°C	8.17	6.09
Cdh Tj = +7 °C	0.98	0.98

Pdh Tj = 12°C	3.28 kW	3.22 kW
COP Tj = 12°C	7.98	6.45
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.88 kW	8.39 kW
COP Tj = Tbiv	5.82	3.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.88 kW	8.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.82	3.56
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	0 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2785 kWh	3888 kWh

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	294 %	201 %
Prated	8.88 kW	8.39 kW

SCOP	7.56	5.23
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.86 kW	7.42 kW
COP Tj = -7°C	6.27	3.92
Cdh Tj = -7 °C	0.99	1.00
Pdh Tj = +2°C	4.78 kW	4.52 kW
COP Tj = +2°C	7.94	5.34
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.07 kW	3.20 kW
COP Tj = +7°C	8.00	5.84
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Pdh Tj = Tbiv	8.88 kW	8.39 kW
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.88 kW	8.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.82	3.56
WTOL	65 °C	65 °C
Poff	5 W	5 W

PTO	9 W	9 W
PSB	9 W	9 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	2428 kWh	3316 kWh

Model: Thermia Calibra Eco 8 230V

Configure model	
Model name	Thermia Calibra Eco 8 230V
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Brine/Water Heat Pump

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.90 kW	6.21 kW
El input	1.06 kW	2.20 kW
COP	4.60	2.83

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	32 dB(A)	32 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	218 %	153 %
Prated	6.70 kW	6.24 kW
SCOP	5.65	4.01
Tbiv	2 °C	2 °C
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Pdh Tj = +2°C	6.70 kW	6.24 kW
COP Tj = +2°C	4.44	2.82
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	4.30 kW	4.01 kW
COP Tj = +7°C	5.47	3.61
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.54 kW	2.40 kW
COP Tj = 12°C	6.24	4.77
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.70 kW	6.24 kW

COP Tj = Tbiv	4.44	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.44	2.82
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 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	1583 kWh	2076 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	32 dB(A)	32 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	227 %	156 %
Prated	6.70 kW	6.24 kW

SCOP	5.87	4.10
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.05 kW	3.77 kW
COP Tj = -7°C	5.68	3.81
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.47 kW	2.30 kW
COP Tj = +2°C	6.28	4.38
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.54 kW	2.41 kW
COP Tj = +7°C	6.30	4.93
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.53 kW	2.44 kW
COP Tj = 12°C	6.17	5.17
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.70 kW	6.24 kW
COP Tj = Tbiv	4.44	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.44	2.82
WTOL	65 °C	65 °C
Poff	5 W	5 W

PTO	9 W	9 W
PSB	9 W	9 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	2810 kWh	3748 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	32 dB(A)	32 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	215 %	156 %
Prated	6.70 kW	6.24 kW
SCOP	5.57	4.10
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.92 kW	5.52 kW
COP Tj = -7°C	4.73	3.12

Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.61 kW	3.36 kW
COP Tj = +2°C	5.70	4.10
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.32 kW	2.16 kW
COP Tj = +7°C	5.96	4.80
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.54 kW	2.16 kW
COP Tj = 12°C	6.28	5.05
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.70 kW	6.24 kW
COP Tj = Tbiv	4.44	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.44	2.82
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	0 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	2485 kWh	3139 kWh

Water/Water Heat Pump

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	8.88 kW	8.39 kW
El input	1.53 kW	2.36 kW
COP	5.82	3.56

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	291 %	193 %
Prated	8.88 kW	8.39 kW

SCOP	7.49	5.02
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.88 kW	8.39 kW
COP Tj = +2°C	5.82	3.56
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	5.71 kW	5.39 kW
COP Tj = +7°C	7.44	4.59
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.28 kW	3.20 kW
COP Tj = 12°C	8.08	5.84
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.88 kW	8.39 kW
COP Tj = Tbiv	5.82	3.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.88 kW	8.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.82	3.56
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	9 W	9 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1585 kWh	2235 kWh

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	306 %	205 %
Prated	8.88 kW	8.39 kW
SCOP	7.86	5.32
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.38 kW	5.08 kW
COP Tj = -7°C	7.81	4.79
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.27 kW	3.09 kW
COP Tj = +2°C	8.34	5.96
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	3.28 kW	3.21 kW
COP Tj = +7°C	8.17	6.09
Cdh Tj = +7 °C	0.98	0.98

Pdh Tj = 12°C	3.28 kW	3.22 kW
COP Tj = 12°C	7.98	6.45
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.88 kW	8.39 kW
COP Tj = Tbiv	5.82	3.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.88 kW	8.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.82	3.56
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	0 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2785 kWh	3888 kWh

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	294 %	201 %
Prated	8.88 kW	8.39 kW

SCOP	7.56	5.23
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.86 kW	7.42 kW
COP Tj = -7°C	6.27	3.92
Cdh Tj = -7 °C	0.99	1.00
Pdh Tj = +2°C	4.78 kW	4.52 kW
COP Tj = +2°C	7.94	5.34
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.07 kW	3.20 kW
COP Tj = +7°C	8.00	5.84
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	3.28 kW	2.16 kW
COP Tj = 12°C	8.14	6.63
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.88 kW	8.39 kW
COP Tj = Tbiv	5.82	3.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.88 kW	8.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.82	3.56
WTOL	65 °C	65 °C
Poff	5 W	5 W

PTO	9 W	9 W
PSB	9 W	9 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	2428 kWh	3316 kWh

Model: Thermia Calibra Eco 8 Duo 230V

Configure model	
Model name	Thermia Calibra Eco 8 Duo 230V
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Brine/Water Heat Pump

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.90 kW	6.21 kW
El input	1.06 kW	2.20 kW
COP	4.60	2.83

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	218 %	153 %
Prated	6.70 kW	6.24 kW
SCOP	5.65	4.01
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.70 kW	6.24 kW
COP Tj = +2°C	4.44	2.82
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	4.30 kW	4.01 kW
COP Tj = +7°C	5.47	3.61
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.54 kW	2.40 kW
COP Tj = 12°C	6.24	4.77
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.70 kW	6.24 kW

COP Tj = Tbiv	4.44	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.44	2.82
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 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	1583 kWh	2076 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	227 %	156 %
Prated	6.70 kW	6.24 kW

SCOP	5.87	4.10
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.05 kW	3.77 kW
COP Tj = -7°C	5.68	3.81
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.47 kW	2.30 kW
COP Tj = +2°C	6.28	4.38
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.54 kW	2.41 kW
COP Tj = +7°C	6.30	4.93
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.53 kW	2.44 kW
COP Tj = 12°C	6.17	5.17
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.70 kW	6.24 kW
COP Tj = Tbiv	4.44	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.44	2.82
WTOL	65 °C	65 °C
Poff	5 W	5 W

PTO	9 W	9 W
PSB	9 W	9 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	2810 kWh	3748 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	215 %	156 %
Prated	6.70 kW	6.24 kW
SCOP	5.57	4.10
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.92 kW	5.52 kW
COP Tj = -7°C	4.73	3.12

Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.61 kW	3.36 kW
COP Tj = +2°C	5.70	4.10
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.32 kW	2.16 kW
COP Tj = +7°C	5.96	4.80
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.54 kW	2.16 kW
COP Tj = 12°C	6.28	5.05
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.70 kW	6.24 kW
COP Tj = Tbiv	4.44	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.44	2.82
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	0 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	2485 kWh	3139 kWh

Water/Water Heat Pump

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	8.88 kW	8.39 kW
El input	1.53 kW	2.36 kW
COP	5.82	3.56

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	291 %	193 %
Prated	8.88 kW	8.39 kW

SCOP	7.49	5.02
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.88 kW	8.39 kW
COP Tj = +2°C	5.82	3.56
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	5.71 kW	5.39 kW
COP Tj = +7°C	7.44	4.59
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.28 kW	3.20 kW
COP Tj = 12°C	8.08	5.84
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.88 kW	8.39 kW
COP Tj = Tbiv	5.82	3.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.88 kW	8.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.82	3.56
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	9 W	9 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1585 kWh	2235 kWh

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	306 %	205 %
Prated	8.88 kW	8.39 kW
SCOP	7.86	5.32
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.38 kW	5.08 kW
COP Tj = -7°C	7.81	4.79
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.27 kW	3.09 kW
COP Tj = +2°C	8.34	5.96
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	3.28 kW	3.21 kW
COP Tj = +7°C	8.17	6.09
Cdh Tj = +7 °C	0.98	0.98

Pdh Tj = 12°C	3.28 kW	3.22 kW
COP Tj = 12°C	7.98	6.45
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.88 kW	8.39 kW
COP Tj = Tbiv	5.82	3.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.88 kW	8.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.82	3.56
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	0 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2785 kWh	3888 kWh

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	294 %	201 %
Prated	8.88 kW	8.39 kW

SCOP	7.56	5.23
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.86 kW	7.42 kW
COP Tj = -7°C	6.27	3.92
Cdh Tj = -7 °C	0.99	1.00
Pdh Tj = +2°C	4.78 kW	4.52 kW
COP Tj = +2°C	7.94	5.34
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.07 kW	3.20 kW
COP Tj = +7°C	8.00	5.84
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	3.28 kW	2.16 kW
COP Tj = 12°C	8.14	6.63
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.88 kW	8.39 kW
COP Tj = Tbiv	5.82	3.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.88 kW	8.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.82	3.56
WTOL	65 °C	65 °C
Poff	5 W	5 W

PTO	9 W	9 W
PSB	9 W	9 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	2428 kWh	3316 kWh