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Login

Summary of	Thermia Calibra 7	Reg. No.	012-SC0066-19
Certificate Holder			
Name	Thermia		
Address	Snickaregatan 1	Zip	
City	Arvika	Country	Sweden
Certification Body	RISE CERT		
Subtype title	Thermia Calibra 7		
Heat Pump Type	Brine/Water and Water/Water		
Refrigerant	R410A		
Mass of Refrigerant	0.95 kg		
Certification Date	04.10.2019		

Model: Thermia Calibra 7 400V

Configure model		
Model name	Thermia Calibra 7 400V	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder 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	4.45 kW	5.05 kW
El input	0.96 kW	1.74 kW
СОР	4.65	2.90

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}	214 %	150 %
Prated	7.11 kW	6.39 kW
SCOP	5.56	3.96
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.29 kW	5.65 kW
COP Tj = -7°C	4.85	3.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.83 kW	3.44 kW
COP Tj = +2°C	5.70	4.03
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.46 kW	2.21 kW
COP Tj = +7°C	6.15	4.55
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.16 kW	2.07 kW





Pdh Tj = Tbiv COP Tj = Tbiv 4.43 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 7.11 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 4.43	4.54 0.97 6.39 kW 2.81
Pdh Tj = Tbiv	6.39 kW
COP Tj = Tbiv 4.43 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 7.11 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 4.43	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 7.11 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 4.43	2.81
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 4.43	
	6.39 kW
WTOL 65 °C	2.81
	65 °C
Poff 12 W	10 W
PTO 15 W	13 W
PSB 15 W	13 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 2597 kWh	

Colder Climate

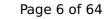
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)

EN 1482	25	
	Low temperature	Medium temperature





n_s	223 %	157 %
Prated	7.11 kW	6.39 kW
SCOP	5.77	4.12
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.30 kW	3.87 kW
COP Tj = -7°C	5.67	3.84
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.62 kW	2.35 kW
COP Tj = +2°C	6.21	4.51
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	2.17 kW	2.07 kW
$COP Tj = +7^{\circ}C$	6.09	4.65
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.15 kW	2.09 kW
COP Tj = 12°C	5.84	4.54
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	6.39 kW





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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.81
WTOL	65 °C	65 °C
Poff	12 W	10 W
РТО	15 W	13 W
PSB	15 W	13 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3008 kWh	3802 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.80	5.21
COP Tj = -15°C (if TOL $<$ -20°C)	5.05	3.33
Cdh Tj = -15 °C	0.99	0.99

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	9.43 kW	8.51 kW
El input	1.58 kW	2.35 kW
СОР	5.96	3.63

Average Climate

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

	Low temperature	Medium temperature
η_{s}	305 %	211 %
Prated	9.43 kW	8.51 kW
SCOP	7.82	5.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.34 kW	7.53 kW
COP Tj = -7°C	6.48	4.03
Cdh Tj = -7 °C	1.00	1.00





This information was generated	ated by the HP KEYMAI	RK database on 18 Mar 202
Pdh Tj = +2°C	5.08 kW	4.58 kW
COP Tj = +2°C	7.93	5.47
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	3.26 kW	2.95 kW
$COPTj = +7^{\circ}C$	8.76	6.55
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.91 kW	2.78 kW
COP Tj = 12°C	8.65	6.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
РТО	4 W	4 W
PSB	4 W	4 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	2463 kWh	3186 kWh
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Colder 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	32 dB(A)	32 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	317 %	219 %
Prated	9.43 kW	8.51 kW
SCOP	8.12	5.68
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.71 kW	5.15 kW
COP Tj = -7°C	7.77	5.12
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.47 kW	3.14 kW
COP Tj = +2°C	8.76	6.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.91 kW	2.78 kW
COP Tj = +7°C	8.76	6.85
Cdh Tj = +7 °C	0.99	0.99



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Pdh Tj = 12°C	2.89 kW	2.79 kW
COP Tj = 12°C	8.39	7.06
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
РТО	4 W	4 W
PSB	4 W	4 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2847 kWh	3676 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.69	6.94
COP Tj = -15°C (if TOL $<$ -20°C)	6.87	4.37
Cdh Tj = -15 °C	1.00	1.00



Model: Thermia Calibra 7 Duo 400V

Configure model		
Model name	Thermia Calibra 7 Duo 400V	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder 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	4.45 kW	5.05 kW	
El input	0.96 kW	1.74 kW	
СОР	4.65	2.90	

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}	214 %	150 %
Prated	7.11 kW	6.39 kW
SCOP	5.56	3.96
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.29 kW	5.65 kW
COP Tj = -7°C	4.85	3.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.83 kW	3.44 kW
COP Tj = +2°C	5.70	4.03
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.46 kW	2.21 kW
COP Tj = +7°C	6.15	4.55
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.16 kW	2.07 kW



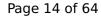


COP Tj = 12°C	6.01	4.54
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	6.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.81
WTOL	65 °C	65 °C
Poff	12 W	10 W
РТО	15 W	13 W
PSB	15 W	13 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2597 kWh	3291 kWh

Colder Climate

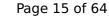
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)

EN 1482	25	
	Low temperature	Medium temperature





		TIMARK database on 10 Mai 2
η_{s}	223 %	157 %
Prated	7.11 kW	6.39 kW
SCOP	5.77	4.12
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.30 kW	3.87 kW
COP Tj = -7°C	5.67	3.84
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.62 kW	2.35 kW
COP Tj = +2°C	6.21	4.51
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	2.17 kW	2.07 kW
$COPTj = +7^{\circ}C$	6.09	4.65
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.15 kW	2.09 kW
COP Tj = 12°C	5.84	4.54
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	6.39 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.81
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WTOL	65 °C	65 °C
Poff	12 W	10 W
РТО	15 W	13 W
PSB	15 W	13 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3008 kWh	3802 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.80	5.21
COP Tj = -15 °C (if TOL< -20 °C)	5.05	3.33
Cdh Tj = -15 °C	0.99	0.99

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	9.43 kW	8.51 kW	
El input	1.58 kW	2.35 kW	
СОР	5.96	3.63	

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}	305 %	211 %
Prated	9.43 kW	8.51 kW
SCOP	7.82	5.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.34 kW	7.53 kW
COP Tj = -7°C	6.48	4.03
Cdh Tj = -7 °C	1.00	1.00
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Inis information was generation	THE TERMAN	RK database on 16 Mai 202
Pdh Tj = +2°C	5.08 kW	4.58 kW
$COP Tj = +2^{\circ}C$	7.93	5.47
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	3.26 kW	2.95 kW
$COP Tj = +7^{\circ}C$	8.76	6.55
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.91 kW	2.78 kW
COP Tj = 12°C	8.65	6.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
РТО	4 W	4 W
PSB	4 W	4 W
РСК	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2463 kWh	3186 kWh
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Colder 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	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	317 %	219 %
Prated	9.43 kW	8.51 kW
SCOP	8.12	5.68
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.71 kW	5.15 kW
COP Tj = -7°C	7.77	5.12
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.47 kW	3.14 kW
COP Tj = +2°C	8.76	6.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.91 kW	2.78 kW
COP Tj = +7°C	8.76	6.85
Cdh Tj = +7 °C	0.99	0.99



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Pdh Tj = 12°C	2.89 kW	2.79 kW
COP Tj = 12°C	8.39	7.06
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
РТО	4 W	4 W
PSB	4 W	4 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	2847 kWh	3676 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.69	6.94
COP Tj = -15 °C (if TOL< -20 °C)	6.87	4.37
Cdh Tj = -15 °C	1.00	1.00



Model: Thermia Calibra 7 230V

Configure model		
Model name	Thermia Calibra 7 230V	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder 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	4.45 kW	5.05 kW
El input	0.96 kW	1.74 kW
СОР	4.65	2.90

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}	214 %	150 %
Prated	7.11 kW	6.39 kW
SCOP	5.56	3.96
Tbiv	-10 °C	-10 °C
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COP Tj = +2°C	5.70	4.03
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.46 kW	2.21 kW
$COP Tj = +7^{\circ}C$	6.15	4.55
Cdh Tj = +7 °C	0.96	0.97
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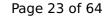


Pdh Tj = Tbiv COP Tj = Tbiv 4.43 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 7.11 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 4.43	4.54 0.97 6.39 kW 2.81
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 4.43	
	6.39 kW
WTOL 65 °C	2.81
	65 °C
Poff 12 W	10 W
PTO 15 W	13 W
PSB 15 W	13 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 2597 kWh	

Colder Climate

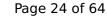
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)

EN 14825		
	Low temperature	Medium temperature





n_s	223 %	157 %
Prated	7.11 kW	6.39 kW
SCOP	5.77	4.12
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.30 kW	3.87 kW
COP Tj = -7°C	5.67	3.84
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.62 kW	2.35 kW
COP Tj = +2°C	6.21	4.51
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	2.17 kW	2.07 kW
$COP Tj = +7^{\circ}C$	6.09	4.65
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.15 kW	2.09 kW
COP Tj = 12°C	5.84	4.54
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	6.39 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.81
WTOL	65 °C	65 °C
Poff	12 W	10 W
PTO	15 W	13 W
PSB	15 W	13 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	3008 kWh	3802 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.80	5.21
COP Tj = -15°C (if TOL $<$ -20°C)	5.05	3.33
Cdh Tj = -15 °C	0.99	0.99

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	

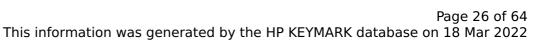


EN 14511-2		
	Low temperature	Medium temperature
Heat output	9.43 kW	8.51 kW
El input	1.58 kW	2.35 kW
СОР	5.96	3.63

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}	305 %	211 %
Prated	9.43 kW	8.51 kW
SCOP	7.82	5.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.34 kW	7.53 kW
COP Tj = -7°C	6.48	4.03
Cdh Tj = -7 °C	1.00	1.00





This information was genera	Tea by the fill RETHING	Tradesis on 10 mar 202
Pdh Tj = +2°C	5.08 kW	4.58 kW
$COP Tj = +2^{\circ}C$	7.93	5.47
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	3.26 kW	2.95 kW
$COP Tj = +7^{\circ}C$	8.76	6.55
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.91 kW	2.78 kW
COP Tj = 12°C	8.65	6.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
РТО	4 W	4 W
PSB	4 W	4 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2463 kWh	3186 kWh



Colder 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 32 dB(A) 32 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	317 %	219 %
Prated	9.43 kW	8.51 kW
SCOP	8.12	5.68
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.71 kW	5.15 kW
COP Tj = -7°C	7.77	5.12
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.47 kW	3.14 kW
COP Tj = +2°C	8.76	6.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.91 kW	2.78 kW
COP Tj = +7°C	8.76	6.85
Cdh Tj = +7 °C	0.99	0.99



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Pdh Tj = 12°C	2.89 kW	2.79 kW
COP Tj = 12°C	8.39	7.06
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
РТО	4 W	4 W
PSB	4 W	4 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2847 kWh	3676 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.69	6.94
COP Tj = -15°C (if TOL $<$ -20°C)	6.87	4.37
Cdh Tj = -15 °C	1.00	1.00



Model: Thermia Calibra 7 Duo 230V

Configure model		
Model name	Thermia Calibra 7 Duo 230V	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder 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			
	Medium temperature		
Heat output	4.45 kW	5.05 kW	
El input	0.96 kW	1.74 kW	
СОР	4.65	2.90	

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}	214 %	150 %
Prated	7.11 kW	6.39 kW
SCOP	5.56	3.96
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.29 kW	5.65 kW
COP Tj = -7°C	4.85	3.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.83 kW	3.44 kW
COP Tj = +2°C	5.70	4.03
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.46 kW	2.21 kW
COP Tj = +7°C	6.15	4.55
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.16 kW	2.07 kW



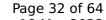


Pdh Tj = Tbiv COP Tj = Tbiv 4.43 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 7.11 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 4.43	4.54 0.97 6.39 kW 2.81
Pdh Tj = Tbiv	6.39 kW
COP Tj = Tbiv 4.43 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 7.11 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 4.43	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 7.11 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 4.43	2.81
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 4.43	
	6.39 kW
WTOL 65 °C	2.81
	65 °C
Poff 12 W	10 W
PTO 15 W	13 W
PSB 15 W	13 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 2597 kWh	

Colder Climate

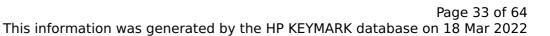
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	Medium temperature





n_s	223 %	157 %
Prated	7.11 kW	6.39 kW
SCOP	5.77	4.12
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.30 kW	3.87 kW
COP Tj = -7°C	5.67	3.84
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.62 kW	2.35 kW
COP Tj = +2°C	6.21	4.51
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	2.17 kW	2.07 kW
$COP Tj = +7^{\circ}C$	6.09	4.65
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.15 kW	2.09 kW
COP Tj = 12°C	5.84	4.54
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	6.39 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.81
WTOL	65 °C	65 °C
Poff	12 W	10 W
PTO	15 W	13 W
PSB	15 W	13 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	3008 kWh	3802 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.80	5.21
COP Tj = -15°C (if TOL $<$ -20°C)	5.05	3.33
Cdh Tj = -15 °C	0.99	0.99

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	9.43 kW	8.51 kW	
El input	1.58 kW	2.35 kW	
СОР	5.96	3.63	

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}	305 %	211 %		
Prated	9.43 kW	8.51 kW		
SCOP	7.82	5.47		
Tbiv	-10 °C	-10 °C		
TOL	-10 °C	-10 °C		
Pdh Tj = -7°C	8.34 kW	7.53 kW		
COP Tj = -7°C	6.48	4.03		
Cdh Tj = -7 °C	1.00	1.00		





Inis information was generated by the HP KEYMARK database on 18 Mar 2022				
Pdh Tj = +2°C	5.08 kW	4.58 kW		
$COP Tj = +2^{\circ}C$	7.93	5.47		
Cdh Tj = +2 °C	0.99	1.00		
Pdh Tj = +7°C	3.26 kW	2.95 kW		
$COP Tj = +7^{\circ}C$	8.76	6.55		
Cdh Tj = +7 °C	0.99	0.99		
Pdh Tj = 12°C	2.91 kW	2.78 kW		
COP Tj = 12°C	8.65	6.84		
Cdh Tj = +12 °C	0.99	0.99		
Pdh Tj = Tbiv	9.43 kW	8.51 kW		
COP Tj = Tbiv	5.96	3.63		
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW		
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63		
WTOL	65 °C	65 °C		
Poff	8 W	8 W		
РТО	4 W	4 W		
PSB	4 W	4 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	2463 kWh	3186 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}	317 %	219 %		
Prated	9.43 kW	8.51 kW		
SCOP	8.12	5.68		
Tbiv	-22 °C	-22 °C		
TOL	-22 °C	-22 °C		
Pdh Tj = -7°C	5.71 kW	5.15 kW		
COP Tj = -7°C	7.77	5.12		
Cdh Tj = -7 °C	1.00	1.00		
Pdh Tj = +2°C	3.47 kW	3.14 kW		
COP Tj = +2°C	8.76	6.31		
Cdh Tj = +2 °C	0.99	0.99		
Pdh Tj = +7°C	2.91 kW	2.78 kW		
COP Tj = +7°C	8.76	6.85		
Cdh Tj = +7 °C	0.99	0.99		



$$\operatorname{\textit{Page}}\xspace$ 27 of 64 This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	2.89 kW	2.79 kW
COP Tj = 12°C	8.39	7.06
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
РТО	4 W	4 W
PSB	4 W	4 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2847 kWh	3676 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.69	6.94
COP Tj = -15°C (if TOL $<$ -20°C)	6.87	4.37
Cdh Tj = -15 °C	1.00	1.00



Model: Thermia Calibra 7 400V (White)

Configure model		
Model name	Thermia Calibra 7 400V (White)	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder 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	4.45 kW	5.05 kW
El input	0.96 kW	1.74 kW
СОР	4.65	2.90

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}	214 %	150 %
Prated	7.11 kW	6.39 kW
SCOP	5.56	3.96
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.29 kW	5.65 kW
COP Tj = -7°C	4.85	3.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.83 kW	3.44 kW
COP Tj = +2°C	5.70	4.03
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.46 kW	2.21 kW
$COP Tj = +7^{\circ}C$	6.15	4.55
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.16 kW	2.07 kW



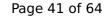


COP Tj = 12°C	6.01	4.54
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	6.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.81
WTOL	65 °C	65 °C
Poff	12 W	10 W
РТО	15 W	13 W
PSB	15 W	13 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2597 kWh	3291 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





		TIMARK database on 10 Mai 2
η_{s}	223 %	157 %
Prated	7.11 kW	6.39 kW
SCOP	5.77	4.12
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.30 kW	3.87 kW
COP Tj = -7°C	5.67	3.84
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.62 kW	2.35 kW
COP Tj = +2°C	6.21	4.51
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	2.17 kW	2.07 kW
$COPTj = +7^{\circ}C$	6.09	4.65
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.15 kW	2.09 kW
COP Tj = 12°C	5.84	4.54
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	6.39 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.81
,,		
WTOL	65 °C	65 °C
Poff	12 W	10 W
РТО	15 W	13 W
PSB	15 W	13 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3008 kWh	3802 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.80	5.21
COP Tj = -15 °C (if TOL< -20 °C)	5.05	3.33
Cdh Tj = -15 °C	0.99	0.99

Water/Water Heat Pump

Heating

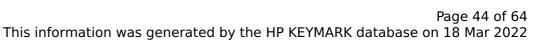
EN 14511-4	
Starting and operating test	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	Medium temperature
Heat output	9.43 kW	8.51 kW
El input	1.58 kW	2.35 kW
СОР	5.96	3.63

Average Climate

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

	Low temperature	Medium temperature
η_{s}	305 %	211 %
Prated	9.43 kW	8.51 kW
SCOP	7.82	5.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.34 kW	7.53 kW
COP Tj = -7°C	6.48	4.03
Cdh Tj = -7 °C	1.00	1.00





This information was genera	Tea by the fill RETHING	Tradesis on 10 mar 202
Pdh Tj = +2°C	5.08 kW	4.58 kW
$COP Tj = +2^{\circ}C$	7.93	5.47
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	3.26 kW	2.95 kW
$COP Tj = +7^{\circ}C$	8.76	6.55
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.91 kW	2.78 kW
COP Tj = 12°C	8.65	6.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
РТО	4 W	4 W
PSB	4 W	4 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2463 kWh	3186 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}	317 %	219 %
Prated	9.43 kW	8.51 kW
SCOP	8.12	5.68
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.71 kW	5.15 kW
COP Tj = -7°C	7.77	5.12
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.47 kW	3.14 kW
COP Tj = +2°C	8.76	6.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.91 kW	2.78 kW
COP Tj = +7°C	8.76	6.85
Cdh Tj = +7 °C	0.99	0.99



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Pdh Tj = 12°C	2.89 kW	2.79 kW
COP Tj = 12°C	8.39	7.06
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
РТО	4 W	4 W
PSB	4 W	4 W
РСК	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2847 kWh	3676 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.69	6.94
COP Tj = -15°C (if TOL<-20°C)	6.87	4.37
Cdh Tj = -15 °C	1.00	1.00

Model: Thermia Calibra Cool 7 400V BW

Configure model		
Model name	Thermia Calibra Cool 7 400V BW	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder 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	4.45 kW	5.05 kW
El input	0.96 kW	1.74 kW
СОР	4.65	2.90

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}	214 %	150 %
Prated	7.11 kW	6.39 kW
SCOP	5.56	3.96
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.29 kW	5.65 kW
COP Tj = -7°C	4.85	3.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.83 kW	3.44 kW
COP Tj = +2°C	5.70	4.03
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.46 kW	2.21 kW
COP Tj = +7°C	6.15	4.55
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.16 kW	2.07 kW



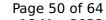


COP Tj = 12°C	6.01	4.54
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	6.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.81
WTOL	65 °C	65 °C
Poff	12 W	10 W
РТО	15 W	13 W
PSB	15 W	13 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2597 kWh	3291 kWh

Colder Climate

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

EN 1482	25	
	Low temperature	Medium temperature





n_s	223 %	157 %
Prated	7.11 kW	6.39 kW
SCOP	5.77	4.12
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.30 kW	3.87 kW
COP Tj = -7°C	5.67	3.84
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.62 kW	2.35 kW
COP Tj = +2°C	6.21	4.51
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	2.17 kW	2.07 kW
$COP Tj = +7^{\circ}C$	6.09	4.65
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.15 kW	2.09 kW
COP Tj = 12°C	5.84	4.54
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	6.39 kW





	<u> </u>	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.81
WTOL	65 °C	65 °C
Poff	12 W	10 W
РТО	15 W	13 W
PSB	15 W	13 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

3008 kWh

5.80

5.05

0.99

3802 kWh

5.21

3.33

0.99

Water/Water Heat Pump

Cdh Tj = -15 $^{\circ}$ C

Annual energy consumption Qhe

Pdh Tj = -15°C (if TOL<-20°C)

COP Tj = -15°C (if TOL<-20°C)

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	9.43 kW	8.51 kW	
El input	1.58 kW	2.35 kW	
СОР	5.96	3.63	

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}	305 %	211 %
Prated	9.43 kW	8.51 kW
SCOP	7.82	5.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.34 kW	7.53 kW
COP Tj = -7°C	6.48	4.03
Cdh Tj = -7 °C	1.00	1.00



This information was genera	Tea by the fill RETHING	Tradesis on 10 mar 202
Pdh Tj = +2°C	5.08 kW	4.58 kW
$COP Tj = +2^{\circ}C$	7.93	5.47
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	3.26 kW	2.95 kW
$COP Tj = +7^{\circ}C$	8.76	6.55
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.91 kW	2.78 kW
COP Tj = 12°C	8.65	6.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
РТО	4 W	4 W
PSB	4 W	4 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2463 kWh	3186 kWh



Colder 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	32 dB(A)	32 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	317 %	219 %
Prated	9.43 kW	8.51 kW
SCOP	8.12	5.68
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.71 kW	5.15 kW
COP Tj = -7°C	7.77	5.12
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.47 kW	3.14 kW
COP Tj = +2°C	8.76	6.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.91 kW	2.78 kW
COP Tj = +7°C	8.76	6.85
Cdh Tj = +7 °C	0.99	0.99



	, -	
Pdh Tj = 12°C	2.89 kW	2.79 kW
COP Tj = 12°C	8.39	7.06
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
РТО	4 W	4 W
PSB	4 W	4 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	2847 kWh	3676 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.69	6.94
COP Tj = -15 °C (if TOL< -20 °C)	6.87	4.37
Cdh Tj = -15 °C	1.00	1.00



Model: Thermia Calibra Cool 7 400V WW

Configure model		
Model name	Thermia Calibra Cool 7 400V WW	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder 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	4.45 kW	5.05 kW
El input	0.96 kW	1.74 kW
СОР	4.65	2.90

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}	214 %	150 %
Prated	7.11 kW	6.39 kW
SCOP	5.56	3.96
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.29 kW	5.65 kW
COP Tj = -7°C	4.85	3.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.83 kW	3.44 kW
COP Tj = +2°C	5.70	4.03
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.46 kW	2.21 kW
$COP Tj = +7^{\circ}C$	6.15	4.55
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.16 kW	2.07 kW



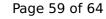


COP Tj = 12°C	6.01	4.54
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	6.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.81
WTOL	65 °C	65 °C
Poff	12 W	10 W
РТО	15 W	13 W
PSB	15 W	13 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2597 kWh	3291 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





		TIMARK database on 10 Mai 2
η_{s}	223 %	157 %
Prated	7.11 kW	6.39 kW
SCOP	5.77	4.12
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.30 kW	3.87 kW
COP Tj = -7°C	5.67	3.84
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.62 kW	2.35 kW
COP Tj = +2°C	6.21	4.51
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	2.17 kW	2.07 kW
$COPTj = +7^{\circ}C$	6.09	4.65
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.15 kW	2.09 kW
COP Tj = 12°C	5.84	4.54
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	6.39 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.81
,,		
WTOL	65 °C	65 °C
Poff	12 W	10 W
РТО	15 W	13 W
PSB	15 W	13 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3008 kWh	3802 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.80	5.21
COP Tj = -15 °C (if TOL< -20 °C)	5.05	3.33
Cdh Tj = -15 °C	0.99	0.99

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	9.43 kW	8.51 kW
El input	1.58 kW	2.35 kW
СОР	5.96	3.63

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}	305 %	211 %	
Prated	9.43 kW	8.51 kW	
SCOP	7.82	5.47	
Tbiv	-10 °C	-10 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	8.34 kW	7.53 kW	
COP Tj = -7°C	6.48	4.03	
Cdh Tj = -7 °C	1.00	1.00	





This information was genera	The tribute of tribute of the tribute of tribute of tribute of the tribute of tribu	Transcore on 10 mar 2022
Pdh Tj = +2°C	5.08 kW	4.58 kW
$COP Tj = +2^{\circ}C$	7.93	5.47
Cdh Tj = +2 °C	0.99	1.00
Pdh Tj = +7°C	3.26 kW	2.95 kW
$COP Tj = +7^{\circ}C$	8.76	6.55
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.91 kW	2.78 kW
COP Tj = 12°C	8.65	6.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
РТО	4 W	4 W
PSB	4 W	4 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2463 kWh	3186 kWh

Colder 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	32 dB(A)	32 dB(A)

EN 14825			
	Low temperature	Medium temperature	
η_{s}	317 %	219 %	
Prated	9.43 kW	8.51 kW	
SCOP	8.12	5.68	
Tbiv	-22 °C	-22 °C	
TOL	-22 °C	-22 °C	
Pdh Tj = -7°C	5.71 kW	5.15 kW	
COP Tj = -7°C	7.77	5.12	
Cdh Tj = -7 °C	1.00	1.00	
Pdh Tj = +2°C	3.47 kW	3.14 kW	
COP Tj = +2°C	8.76	6.31	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	2.91 kW	2.78 kW	
COP Tj = +7°C	8.76	6.85	
Cdh Tj = +7 °C	0.99	0.99	



This information was generated by the Fir RETPIARR database on 10 Plai 2022				
Pdh Tj = 12°C	2.89 kW	2.79 kW		
COP Tj = 12°C	8.39	7.06		
Cdh Tj = +12 °C	0.99	0.99		
Pdh Tj = Tbiv	9.43 kW	8.51 kW		
COP Tj = Tbiv	5.96	3.63		
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	8.51 kW		
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.96	3.63		
WTOL	65 °C	65 °C		
Poff	8 W	8 W		
РТО	4 W	4 W		
PSB	4 W	4 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	2847 kWh	3676 kWh		
Pdh Tj = -15°C (if TOL<-20°C)	7.69	6.94		
COP Tj = -15°C (if TOL<-20°C)	6.87	4.37		
Cdh Tj = -15 °C	1.00	1.00		