

Summary of	Mega S	Reg. No.	012-SC0836-18	
Certificate Holder				
Name	Thermia			
Address	Snickaregatan 1	Zip		
City	Arvika	Country	Sweden	
Certification Body	RISE CERT	RISE CERT		
Name of testing laboratory	RISE	RISE		
Subtype title	Mega S	Mega S		
Heat Pump Type	Brine/Water and Wat	Brine/Water and Water/Water		
Refrigerant	R410a	R410a		
Mass Of Refrigerant	3.9 kg	3.9 kg		
Certification Date	10.04.2019			



Model: Thermia Mega S 2020

General Data		
Power supply	3x400V 50Hz	

Brine/Water Heat Pump

Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

EN 14511-2		
	Low temperature	Medium temperature
Heat output	20.18 kW	18.93 kW
El input	4.26 kW	6.42 kW
СОР	4.73	2.95
Indoor water flow rate	3.50 m³/h	2.06 m³/h

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	214 %	159 %
Prated	33.28 kW	31.13 kW
SCOP	5.55	4.18
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	29.44 kW	27.54 kW
COP Tj = -7°C	4.63	3.14
Pdh Tj = +2°C	17.92 kW	16.76 kW
COP Tj = +2°C	5.57	4.21
Pdh Tj = +7°C	11.52 kW	10.78 kW
COP Tj = +7°C	6.11	4.83
Pdh Tj = 12°C	12.52 kW	12.16 kW
COP Tj = 12°C	6.05	5.00
Pdh Tj = Tbiv	33.28 kW	31.13 kW
COP Tj = Tbiv	4.26	2.86





Pdh Tj = TOL	33.28 kW	31.13 kW
COP Tj = TOL	4.26	2.86
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	o w	o w
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	12358 kWh	15305 kWh

Warmer Climate

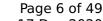
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
Low temperature	Medium temperature	
214 %	160 %	
33.28 kW	31.13 kW	
	Low temperature 214 %	





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SCOP	5.54	4.19
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	33.28 kW	31.13 kW
COP Tj = +2°C	4.26	2.86
Pdh Tj = +7°C	21.39 kW	20.01 kW
$COPTj = +7^{\circ}C$	5.30	3.78
Pdh Tj = 12°C	12.51 kW	12.08 kW
COP Tj = 12°C	6.06	4.85
Pdh Tj = Tbiv	33.28 kW	31.13 kW
COP Tj = Tbiv	4.26	2.86
Pdh Tj = TOL	33.28 kW	31.13 kW
COP Tj = TOL	4.26	2.86
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW





Annual energy consumption Qhe	7963 kWh	9906 kWh
Tunida, energy consumption que	7 5 5 1 1 1 1 1	

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825			
	Low temperature	Medium temperature	
η_{s}	221 %	165 %	
Prated	33.28 kW	31.13 kW	
SCOP	5.72	4.33	
Tbiv	-22 °C	-22 °C	
TOL	-22 °C	-22 °C	
Pdh Tj = -7°C	20.14 kW	18.84 kW	
COP Tj = -7°C	5.49	3.99	
Pdh Tj = +2°C	12.26 kW	11.47 kW	
COP Tj = +2°C	6.11	4.73	
Pdh Tj = +7°C	12.53 kW	12.14 kW	
COP Tj = +7°C	6.10	4.98	
Pdh Tj = 12°C	12.49 kW	12.22 kW	





5.91	5.12
33.28 kW	31.13 kW
4.26	2.86
33.28 kW	31.13 kW
4.26	2.86
0.99	0.99
65 °C	65 °C
12 W	12 W
12 W	12 W
12 W	12 W
0 W	0 W
No	No
0.00 kW	0.00 kW
14325 kWh	17698 kWh
	33.28 kW 4.26 33.28 kW 4.26 0.99 65 °C 12 W 12 W 12 W 0 W No 0.00 kW

Water/Water Heat Pump

Heating



EN 14511-4	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

EN 14511-2				
	Low temperature	Medium temperature		
Heat output	24.52 kW	34.95 kW		
El input	3.79 kW	9.26 kW		
СОР	6.47	3.77		
Indoor water flow rate	4.25 m³/h	3.82 m³/h		

Average Climate

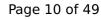
EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	47 dB(A)	47 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
η_s	298 %	214 %	





Prated	24.52 kW	34.95 kW
SCOP	7.66	5.54
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	21.69 kW	30.92 kW
COP Tj = -7°C	6.85	4.12
Pdh Tj = $+2$ °C	15.84 kW	18.82 kW
COP Tj = +2°C	7.75	5.61
Pdh Tj = $+7^{\circ}$ C	15.99 kW	15.99 kW
COP Tj = +7°C	8.11	6.32
Pdh Tj = 12°C	16.15 kW	16.19 kW
COP Tj = 12°C	8.50	6.81
Pdh Tj = Tbiv	24.52 kW	34.95 kW
COP Tj = Tbiv	6.47	3.77
Pdh Tj = TOL	24.52 kW	34.95 kW
COP Tj = TOL	6.47	3.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W





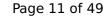
This information was ger	nerated by the HP KEYM	ARK database on 17 Dec 2020

PCK	0 W	o w
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6614 kWh	13029 kWh

Warmer Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	47 dB(A)	47 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
η_{s}	302 %	213 %	
Prated	24.52 kW	34.95 kW	
SCOP	7.76	5.52	
Tbiv	2 °C	2 °C	
TOL	2 °C	2 °C	
Pdh Tj = +2°C	24.52 kW	34.95 kW	
COP Tj = +2°C	6.47	3.77	
Pdh Tj = +7°C	15.76 kW	22.47 kW	
$COP Tj = +7^{\circ}C$	7.72	4.98	





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This information	was generated b	y the HP KEYMARK	database on 1	7 Dec 2020

	<u> </u>	
Pdh Tj = 12°C	16.05 kW	16.06 kW
COP Tj = 12°C	8.25	6.49
Pdh Tj = Tbiv	24.52 kW	34.95 kW
COP Tj = Tbiv	6.47	3.77
Pdh Tj = TOL	24.52 kW	34.95 kW
COP Tj = TOL	6.47	3.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4223 kWh	8453 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)





EN 14825

	Low temperature	Medium temperature
η_{s}	310 %	222 %
Prated	24.52 kW	34.95 kW
SCOP	7.94	5.74
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	15.93 kW	21.16 kW
COP Tj = -7°C	7.95	5.31
Pdh Tj = +2°C	16.01 kW	15.95 kW
COP Tj = +2°C	8.15	6.22
Pdh Tj = +7°C	16.11 kW	16.15 kW
COP Tj = +7°C	8.41	6.70
Pdh Tj = 12°C	16.11 kW	16.27 kW
COP Tj = 12°C	8.41	7.04
Pdh Tj = Tbiv	24.52 kW	34.95 kW
COP Tj = Tbiv	6.47	3.77
Pdh Tj = TOL	24.52 kW	34.95 kW
COP Tj = TOL	6.47	3.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C



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Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	o w	o w
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	7613 kWh	15016 kWh

Model: Thermia Mega S

General Data	
Power supply	3x400V 50Hz

Brine/Water Heat Pump

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

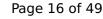
EN 14511-2		
	Low temperature	Medium temperature
Heat output	20.18 kW	18.93 kW
El input	4.26 kW	6.42 kW
СОР	4.73	2.95
Indoor water flow rate	3.50 m³/h	2.06 m³/h

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	214 %	159 %
Prated	33.28 kW	31.13 kW
SCOP	5.55	4.18
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	29.44 kW	27.54 kW
COP Tj = -7°C	4.63	3.14
Pdh Tj = +2°C	17.92 kW	16.76 kW
COP Tj = +2°C	5.57	4.21
Pdh Tj = +7°C	11.52 kW	10.78 kW
COP Tj = +7°C	6.11	4.83
Pdh Tj = 12°C	12.52 kW	12.16 kW
COP Tj = 12°C	6.05	5.00
Pdh Tj = Tbiv	33.28 kW	31.13 kW
COP Tj = Tbiv	4.26	2.86





Pdh Tj = TOL	33.28 kW	31.13 kW
COP Tj = TOL	4.26	2.86
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	12358 kWh	15305 kWh

Warmer Climate

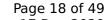
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	214 %	160 %
Prated	33.28 kW	31.13 kW





This information was generated by the HP KEYMARK database on 17 Dec 2020			
SCOP	5.54	4.19	
Tbiv	2 °C	2 °C	
TOL	2 °C	2 °C	
Pdh Tj = +2°C	33.28 kW	31.13 kW	
COP Tj = +2°C	4.26	2.86	
Pdh Tj = +7°C	21.39 kW	20.01 kW	
$COPTj = +7^{\circ}C$	5.30	3.78	
Pdh Tj = 12°C	12.51 kW	12.08 kW	
COP Tj = 12°C	6.06	4.85	
Pdh Tj = Tbiv	33.28 kW	31.13 kW	
COP Tj = Tbiv	4.26	2.86	
Pdh Tj = TOL	33.28 kW	31.13 kW	
COP Tj = TOL	4.26	2.86	
Cdh	0.99	0.99	
WTOL	65 °C	65 °C	
Poff	12 W	12 W	
РТО	12 W	12 W	
PSB	12 W	12 W	
PCK	0 W	0 W	
Supplementary Heater: Type of energy input	No	No	
Supplementary Heater: PSUP	0.00 kW	0.00 kW	



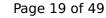


Annual energy consumption Qhe	7963 kWh	9906 kWh
Tunida, energy consumption que	7 5 5 1 1 1 1 1	

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	47 dB(A)	47 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	221 %	165 %
Prated	33.28 kW	31.13 kW
SCOP	5.72	4.33
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	20.14 kW	18.84 kW
COP Tj = -7°C	5.49	3.99
Pdh Tj = +2°C	12.26 kW	11.47 kW
COP Tj = +2°C	6.11	4.73
Pdh Tj = +7°C	12.53 kW	12.14 kW
COP Tj = +7°C	6.10	4.98
Pdh Tj = 12°C	12.49 kW	12.22 kW





i = 12°C 5.91 5.12	

COP Tj = 12°C	5.91	5.12
Pdh Tj = Tbiv	33.28 kW	31.13 kW
COP Tj = Tbiv	4.26	2.86
Pdh Tj = TOL	33.28 kW	31.13 kW
COP Tj = TOL	4.26	2.86
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	14325 kWh	17698 kWh

Water/Water Heat Pump

Heating



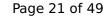
EN 14511-4		
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	24.52 kW	34.95 kW	
El input	3.79 kW	9.26 kW	
СОР	6.47	3.77	
Indoor water flow rate	4.25 m³/h	3.82 m³/h	

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	298 %	214 %





Prated	24.52 kW	34.95 kW
SCOP	7.66	5.54
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	21.69 kW	30.92 kW
COP Tj = -7°C	6.85	4.12
Pdh Tj = +2°C	15.84 kW	18.82 kW
COP Tj = +2°C	7.75	5.61
Pdh Tj = +7°C	15.99 kW	15.99 kW
$COPTj = +7^{\circ}C$	8.11	6.32
Pdh Tj = 12°C	16.15 kW	16.19 kW
COP Tj = 12°C	8.50	6.81
Pdh Tj = Tbiv	24.52 kW	34.95 kW
COP Tj = Tbiv	6.47	3.77
Pdh Tj = TOL	24.52 kW	34.95 kW
COP Tj = TOL	6.47	3.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W



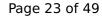


PCK	0 W	o w
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6614 kWh	13029 kWh

Warmer Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	47 dB(A)	47 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	302 %	213 %
Prated	24.52 kW	34.95 kW
SCOP	7.76	5.52
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	24.52 kW	34.95 kW
COP Tj = +2°C	6.47	3.77
Pdh Tj = +7°C	15.76 kW	22.47 kW
COP Tj = +7°C	7.72	4.98





	<u> </u>	
Pdh Tj = 12°C	16.05 kW	16.06 kW
COP Tj = 12°C	8.25	6.49
Pdh Tj = Tbiv	24.52 kW	34.95 kW
COP Tj = Tbiv	6.47	3.77
Pdh Tj = TOL	24.52 kW	34.95 kW
COP Tj = TOL	6.47	3.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4223 kWh	8453 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)





EN 14825

	Low temperature	Medium temperature
η_{s}	310 %	222 %
Prated	24.52 kW	34.95 kW
SCOP	7.94	5.74
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	15.93 kW	21.16 kW
COP Tj = -7°C	7.95	5.31
Pdh Tj = +2°C	16.01 kW	15.95 kW
COP Tj = +2°C	8.15	6.22
Pdh Tj = +7°C	16.11 kW	16.15 kW
COP Tj = +7°C	8.41	6.70
Pdh Tj = 12°C	16.11 kW	16.27 kW
COP Tj = 12°C	8.41	7.04
Pdh Tj = Tbiv	24.52 kW	34.95 kW
COP Tj = Tbiv	6.47	3.77
Pdh Tj = TOL	24.52 kW	34.95 kW
COP Tj = TOL	6.47	3.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C



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Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	7613 kWh	15016 kWh



Model: Thermia Mega S 230

General Data		
Power supply	3x230V 50Hz	

Brine/Water Heat Pump

Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

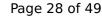
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	20.18 kW	18.93 kW	
El input	4.26 kW	6.42 kW	
СОР	4.73	2.95	
Indoor water flow rate	3.50 m³/h	2.06 m³/h	

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	214 %	159 %
Prated	33.28 kW	31.13 kW
SCOP	5.55	4.18
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	29.44 kW	27.54 kW
COP Tj = -7°C	4.63	3.14
Pdh Tj = +2°C	17.92 kW	16.76 kW
COP Tj = +2°C	5.57	4.21
Pdh Tj = +7°C	11.52 kW	10.78 kW
COP Tj = +7°C	6.11	4.83
Pdh Tj = 12°C	12.52 kW	12.16 kW
COP Tj = 12°C	6.05	5.00
Pdh Tj = Tbiv	33.28 kW	31.13 kW
COP Tj = Tbiv	4.26	2.86





Pdh Tj = TOL	33.28 kW	31.13 kW
COP Tj = TOL	4.26	2.86
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	o w	o w
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	12358 kWh	15305 kWh

Warmer Climate

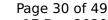
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
Low temperature	Medium temperature	
214 %	160 %	
33.28 kW	31.13 kW	
	Low temperature 214 %	





Inis information was generated by the HP KEYMARK database on 17 Dec 2020		
SCOP	5.54	4.19
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	33.28 kW	31.13 kW
COP Tj = +2°C	4.26	2.86
Pdh Tj = +7°C	21.39 kW	20.01 kW
$COPTj = +7^{\circ}C$	5.30	3.78
Pdh Tj = 12°C	12.51 kW	12.08 kW
COP Tj = 12°C	6.06	4.85
Pdh Tj = Tbiv	33.28 kW	31.13 kW
COP Tj = Tbiv	4.26	2.86
Pdh Tj = TOL	33.28 kW	31.13 kW
COP Tj = TOL	4.26	2.86
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW





Annual energy consumption Qhe	7963 kWh	9906 kWh
Tunida, energy consumption que	7 5 5 1 1 1 1 1	

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	221 %	165 %
Prated	33.28 kW	31.13 kW
SCOP	5.72	4.33
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	20.14 kW	18.84 kW
COP Tj = -7°C	5.49	3.99
Pdh Tj = +2°C	12.26 kW	11.47 kW
COP Tj = +2°C	6.11	4.73
Pdh Tj = +7°C	12.53 kW	12.14 kW
COP Tj = +7°C	6.10	4.98
Pdh Tj = 12°C	12.49 kW	12.22 kW



COP Tj = 12°C	5.91	5.12
Pdh Tj = Tbiv	33.28 kW	31.13 kW
COP Tj = Tbiv	4.26	2.86
Pdh Tj = TOL	33.28 kW	31.13 kW
COP Tj = TOL	4.26	2.86
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	14325 kWh	17698 kWh

Water/Water Heat Pump

Heating



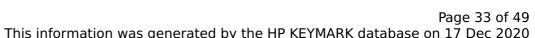
EN 14511-4	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

EN 14511-2		
	Low temperature	Medium temperature
Heat output	24.52 kW	34.95 kW
El input	3.79 kW	9.26 kW
СОР	6.47	3.77
Indoor water flow rate	4.25 m³/h	3.82 m³/h

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	298 %	214 %



ion was generated by the HP	KEYMARK database on 17 Dec 202
24.52 kW	34.95 kW
7.66	5.54
-10 °C	-10 °C
-10 °C	-10 °C
21.69 kW	30.92 kW
6.85	4.12
15.84 kW	18.82 kW
7.75	5.61
15.99 kW	15.99 kW
8.11	6.32
16.15 kW	16.19 kW
8.50	6.81
24.52 kW	34.95 kW
6.47	3.77
24.52 kW	34.95 kW
6.47	3.77
1.00	1.00
65 °C	65 °C
12 W	12 W
12 W	12 W
12 W	12 W
	24.52 kW 7.66 -10 °C -10 °C 21.69 kW 6.85 15.84 kW 7.75 15.99 kW 8.11 16.15 kW 8.50 24.52 kW 6.47 24.52 kW 6.47 1.00 65 °C 12 W

CEN heat pump KEYMARK



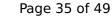


PCK	0 W	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6614 kWh	13029 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	302 %	213 %
Prated	24.52 kW	34.95 kW
SCOP	7.76	5.52
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	24.52 kW	34.95 kW
COP Tj = +2°C	6.47	3.77
Pdh Tj = $+7^{\circ}$ C	15.76 kW	22.47 kW
COP Tj = +7°C	7.72	4.98
	·	·





	<u> </u>	
Pdh Tj = 12°C	16.05 kW	16.06 kW
COP Tj = 12°C	8.25	6.49
Pdh Tj = Tbiv	24.52 kW	34.95 kW
COP Tj = Tbiv	6.47	3.77
Pdh Tj = TOL	24.52 kW	34.95 kW
COP Tj = TOL	6.47	3.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4223 kWh	8453 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)





EN 14825

	Low temperature	Medium temperature
η_{s}	310 %	222 %
Prated	24.52 kW	34.95 kW
SCOP	7.94	5.74
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	15.93 kW	21.16 kW
COP Tj = -7°C	7.95	5.31
Pdh Tj = +2°C	16.01 kW	15.95 kW
COP Tj = +2°C	8.15	6.22
Pdh Tj = +7°C	16.11 kW	16.15 kW
COP Tj = +7°C	8.41	6.70
Pdh Tj = 12°C	16.11 kW	16.27 kW
COP Tj = 12°C	8.41	7.04
Pdh Tj = Tbiv	24.52 kW	34.95 kW
COP Tj = Tbiv	6.47	3.77
Pdh Tj = TOL	24.52 kW	34.95 kW
COP Tj = TOL	6.47	3.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C



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Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	7613 kWh	15016 kWh

Model: Thermia Mega S 3-230 2020

General Data	
Power supply	3x230V 50Hz

Brine/Water Heat Pump

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

EN 14511-2		
	Low temperature	Medium temperature
Heat output	20.18 kW	18.93 kW
El input	4.26 kW	6.42 kW
СОР	4.73	2.95
Indoor water flow rate	3.50 m³/h	2.06 m³/h

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	214 %	159 %
Prated	33.28 kW	31.13 kW
SCOP	5.55	4.18
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	29.44 kW	27.54 kW
COP Tj = -7°C	4.63	3.14
Pdh Tj = +2°C	17.92 kW	16.76 kW
COP Tj = +2°C	5.57	4.21
Pdh Tj = +7°C	11.52 kW	10.78 kW
COP Tj = +7°C	6.11	4.83
Pdh Tj = 12°C	12.52 kW	12.16 kW
COP Tj = 12°C	6.05	5.00
Pdh Tj = Tbiv	33.28 kW	31.13 kW
COP Tj = Tbiv	4.26	2.86

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Pdh Tj = TOL	33.28 kW	31.13 kW
COP Tj = TOL	4.26	2.86
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	o w	o w
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	12358 kWh	15305 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	214 %	160 %
Prated	33.28 kW	31.13 kW





This information was generated by the HP KEYMARK database on 17 Dec 2020			
SCOP	5.54	4.19	
Tbiv	2 °C	2 °C	
TOL	2 °C	2 °C	
Pdh Tj = +2°C	33.28 kW	31.13 kW	
COP Tj = +2°C	4.26	2.86	
Pdh Tj = +7°C	21.39 kW	20.01 kW	
$COPTj = +7^{\circ}C$	5.30	3.78	
Pdh Tj = 12°C	12.51 kW	12.08 kW	
COP Tj = 12°C	6.06	4.85	
Pdh Tj = Tbiv	33.28 kW	31.13 kW	
COP Tj = Tbiv	4.26	2.86	
Pdh Tj = TOL	33.28 kW	31.13 kW	
COP Tj = TOL	4.26	2.86	
Cdh	0.99	0.99	
WTOL	65 °C	65 °C	
Poff	12 W	12 W	
РТО	12 W	12 W	
PSB	12 W	12 W	
PCK	0 W	0 W	
Supplementary Heater: Type of energy input	No	No	
Supplementary Heater: PSUP	0.00 kW	0.00 kW	





Annual energy consumption Qhe 7963 kWh 9906 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	221 %	165 %
Prated	33.28 kW	31.13 kW
SCOP	5.72	4.33
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	20.14 kW	18.84 kW
COP Tj = -7°C	5.49	3.99
Pdh Tj = +2°C	12.26 kW	11.47 kW
COP Tj = +2°C	6.11	4.73
Pdh Tj = +7°C	12.53 kW	12.14 kW
COP Tj = +7°C	6.10	4.98
Pdh Tj = 12°C	12.49 kW	12.22 kW

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5.91	5.12
33.28 kW	31.13 kW
4.26	2.86
33.28 kW	31.13 kW
4.26	2.86
0.99	0.99
65 °C	65 °C
12 W	12 W
12 W	12 W
12 W	12 W
0 W	0 W
No	No
0.00 kW	0.00 kW
14325 kWh	17698 kWh
	33.28 kW 4.26 33.28 kW 4.26 0.99 65 °C 12 W 12 W 12 W 0 W No 0.00 kW

Water/Water Heat Pump

Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	24.52 kW	34.95 kW	
El input	3.79 kW	9.26 kW	
СОР	6.47	3.77	
Indoor water flow rate	4.25 m³/h	3.82 m³/h	

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	298 %	214 %





Prated	24.52 kW	34.95 kW
SCOP	7.66	5.54
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	21.69 kW	30.92 kW
COP Tj = -7°C	6.85	4.12
Pdh Tj = +2°C	15.84 kW	18.82 kW
COP Tj = +2°C	7.75	5.61
Pdh Tj = +7°C	15.99 kW	15.99 kW
COP Tj = +7°C	8.11	6.32
Pdh Tj = 12°C	16.15 kW	16.19 kW
COP Tj = 12°C	8.50	6.81
Pdh Tj = Tbiv	24.52 kW	34.95 kW
COP Tj = Tbiv	6.47	3.77
Pdh Tj = TOL	24.52 kW	34.95 kW
COP Tj = TOL	6.47	3.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W





This information was	generated by the HP KEYM	ARK database on 17 Dec 2020

PCK	o w	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6614 kWh	13029 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	302 %	213 %
Prated	24.52 kW	34.95 kW
SCOP	7.76	5.52
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	24.52 kW	34.95 kW
COP Tj = +2°C	6.47	3.77
Pdh Tj = +7°C	15.76 kW	22.47 kW
$COP Tj = +7^{\circ}C$	7.72	4.98





	<u> </u>	
Pdh Tj = 12°C	16.05 kW	16.06 kW
COP Tj = 12°C	8.25	6.49
Pdh Tj = Tbiv	24.52 kW	34.95 kW
COP Tj = Tbiv	6.47	3.77
Pdh Tj = TOL	24.52 kW	34.95 kW
COP Tj = TOL	6.47	3.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4223 kWh	8453 kWh

Colder Climate

EN 12102-1				
	Low temperature	Medium temperature		
Sound power level indoor	47 dB(A)	47 dB(A)		





EN 14825

	Low temperature	Medium temperature
η _s	310 %	222 %
Prated	24.52 kW	34.95 kW
SCOP	7.94	5.74
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	15.93 kW	21.16 kW
COP Tj = -7°C	7.95	5.31
Pdh Tj = +2°C	16.01 kW	15.95 kW
COP Tj = +2°C	8.15	6.22
Pdh Tj = +7°C	16.11 kW	16.15 kW
COP Tj = +7°C	8.41	6.70
Pdh Tj = 12°C	16.11 kW	16.27 kW
COP Tj = 12°C	8.41	7.04
Pdh Tj = Tbiv	24.52 kW	34.95 kW
COP Tj = Tbiv	6.47	3.77
Pdh Tj = TOL	24.52 kW	34.95 kW
COP Tj = TOL	6.47	3.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C

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Poff	12 W	12 W
РТО	12 W	12 W
PSB	12 W	12 W
PCK	o w	o w
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	7613 kWh	15016 kWh