

Summary of	Mega XL	Reg. No.	012-SC0833-18	
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 XL	Mega XL		
Heat Pump Type	Brine/Water and Wat	Brine/Water and Water/Water		
Refrigerant	R410a	R410a		
Mass Of Refrigerant	9 kg	9 kg		
Certification Date	10.04.2019			



Model: Thermia Mega XL 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	52.18 kW	48.32 kW
El input	11.09 kW	17.02 kW
СОР	4.71	2.84
Indoor water flow rate	9.04 m³/h	5.26 m³/h

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	199 %	157 %
Prated	84.67 kW	79.00 kW
SCOP	5.17	4.13
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	74.90 kW	69.88 kW
COP Tj = -7°C	4.26	3.00
Pdh Tj = +2°C	45.59 kW	42.54 kW
COP Tj = +2°C	5.14	4.08
Pdh Tj = +7°C	29.31 kW	27.35 kW
COP Tj = +7°C	5.81	4.94
Pdh Tj = 12°C	24.37 kW	24.08 kW
COP Tj = 12°C	5.65	5.16
Pdh Tj = Tbiv	84.67 kW	79.00 kW
COP Tj = Tbiv	3.97	2.72





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Pdh Tj = TOL	84.67 kW	79.00 kW
COP Tj = TOL	3.97	2.72
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
РТО	11 W	11 W
PSB	11 W	11 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	33804 kWh	39457 kWh

Warmer Climate

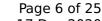
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	202 %	160 %
Prated	84.67 kW	79.00 kW





This information was generated by the HP RETMARK database on 17 Dec 2020			
SCOP	5.25	4.21	
Tbiv	2 °C	2 °C	
TOL	2 °C	2 °C	
Pdh Tj = +2°C	84.67 kW	79.00 kW	
$COP Tj = +2^{\circ}C$	3.97	2.72	
Pdh Tj = +7°C	54.43 kW	50.79 kW	
$COPTj = +7^{\circ}C$	4.85	3.60	
Pdh Tj = 12°C	24.19 kW	24.07 kW	
COP Tj = 12°C	5.85	5.16	
Pdh Tj = Tbiv	84.67 kW	79.00 kW	
COP Tj = Tbiv	3.97	2.72	
Pdh Tj = TOL	84.67 kW	79.00 kW	
COP Tj = TOL	3.97	2.72	
Cdh	1.00	1.00	
WTOL	65 °C	65 °C	
Poff	9 W	9 W	
РТО	11 W	11 W	
PSB	11 W	11 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	21524 kWh	23056 kWh	
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Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	204 %	165 %
Prated	84.67 kW	79.00 kW
SCOP	5.30	4.32
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	51.25 kW	48.52 kW
COP Tj = -7°C	5.06	3.85
Pdh Tj = +2°C	31.20 kW	29.11 kW
COP Tj = +2°C	5.81	4.83
Pdh Tj = +7°C	24.49 kW	24.11 kW
COP Tj = +7°C	5.85	5.20
Pdh Tj = 12°C	24.39 kW	24.22 kW





COP Tj = 12°C	5.66	5.27
Pdh Tj = Tbiv	84.67 kW	79.00 kW
COP Tj = Tbiv	3.97	2.72
Pdh Tj = TOL	84.67 kW	79.00 kW
COP Tj = TOL	3.97	2.72
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
РТО	11 W	11 W
PSB	11 W	11 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	39378 kWh	45048 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	69.37 kW	62.91 kW
El input	12.10 kW	16.47 kW
СОР	5.73	3.82
Indoor water flow rate	11.86 m³/h	6.76 m³/h

Average Climate

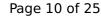
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	277 %	210 %





		ARK database on 17 Dec 202
Prated	66.39 kW	80.95 kW
SCOP	7.12	5.40
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	58.73 kW	71.61 kW
$COP Tj = -7^{\circ}C$	6.01	4.08
Pdh Tj = $+2$ °C	35.75 kW	43.59 kW
COP Tj = +2°C	7.29	5.37
Pdh Tj = $+7^{\circ}$ C	31.01 kW	28.02 kW
$COPTj = +7^{\circ}C$	7.49	6.28
Pdh Tj = 12°C	31.34 kW	31.22 kW
COP Tj = 12°C	7.74	6.48
Pdh Tj = Tbiv	66.39 kW	80.95 kW
COP Tj = Tbiv	5.65	3.71
Pdh Tj = TOL	66.39 kW	80.95 kW
COP Tj = TOL	5.65	3.71
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
РТО	11 W	11 W
PSB	11 W	11 W
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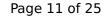


PCK	o w	o w
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	19268 kWh	30975 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	278 %	204 %
Prated	66.39 kW	80.95 kW
SCOP	7.16	5.29
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	66.39 kW	80.95 kW
COP Tj = +2°C	5.65	3.71
Pdh Tj = +7°C	42.68 kW	52.04 kW
$COP Tj = +7^{\circ}C$	7.02	4.65
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Pdh Tj = 12°C	31.13 kW	31.03 kW
COP Tj = 12°C	7.58	6.27
Pdh Tj = Tbiv	66.39 kW	80.95 kW
COP Tj = Tbiv	5.65	3.71
Pdh Tj = TOL	66.39 kW	80.95 kW
COP Tj = TOL	5.65	3.71
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
РТО	11 W	11 W
PSB	11 W	11 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	12392 kWh	20426 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)





EN 14825

	Low temperature	Medium temperature
η_{s}	285 %	215 %
Prated	66.39 kW	80.95 kW
SCOP	7.32	5.57
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	40.18 kW	49.00 kW
COP Tj = -7°C	7.28	5.06
Pdh Tj = +2°C	31.09 kW	29.83 kW
COP Tj = +2°C	7.55	6.11
Pdh Tj = +7°C	31.30 kW	31.18 kW
$COP Tj = +7^{\circ}C$	7.70	6.43
Pdh Tj = 12°C	31.16 kW	31.37 kW
COP Tj = 12°C	7.60	6.66
Pdh Tj = Tbiv	66.39 kW	80.95 kW
COP Tj = Tbiv	5.65	3.71
Pdh Tj = TOL	66.39 kW	80.95 kW
COP Tj = TOL	5.65	3.71
Cdh	1.00	1.00
WTOL	65 °C	65 °C



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Poff	9 W	9 W
РТО	11 W	11 W
PSB	11 W	11 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	22343 kWh	35849 kWh



Model: Thermia Mega XL

Ger	neral Data
Power supply	3x400V 50Hz

Brine/Water Heat Pump

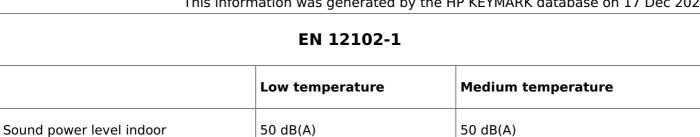
Heating

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	52.18 kW	48.32 kW
El input	11.09 kW	17.02 kW
СОР	4.71	2.84
Indoor water flow rate	9.04 m³/h	5.26 m³/h

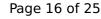
Average Climate





CEN heat pump

EN 14825		
	Low temperature	Medium temperature
η _s	199 %	157 %
Prated	84.67 kW	79.00 kW
SCOP	5.17	4.13
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	74.90 kW	69.88 kW
COP Tj = -7°C	4.26	3.00
Pdh Tj = +2°C	45.59 kW	42.54 kW
COP Tj = +2°C	5.14	4.08
Pdh Tj = +7°C	29.31 kW	27.35 kW
COP Tj = +7°C	5.81	4.94
Pdh Tj = 12°C	24.37 kW	24.08 kW
COP Tj = 12°C	5.65	5.16
Pdh Tj = Tbiv	84.67 kW	79.00 kW
COP Tj = Tbiv	3.97	2.72



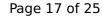


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Pdh Tj = TOL	84.67 kW	79.00 kW
COP Tj = TOL	3.97	2.72
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	33804 kWh	39457 kWh

Warmer Climate

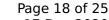
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	202 %	160 %
Prated	84.67 kW	79.00 kW





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SCOP	5.25	4.21
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	84.67 kW	79.00 kW
$COP Tj = +2^{\circ}C$	3.97	2.72
Pdh Tj = +7°C	54.43 kW	50.79 kW
$COPTj = +7^{\circ}C$	4.85	3.60
Pdh Tj = 12°C	24.19 kW	24.07 kW
COP Tj = 12°C	5.85	5.16
Pdh Tj = Tbiv	84.67 kW	79.00 kW
COP Tj = Tbiv	3.97	2.72
Pdh Tj = TOL	84.67 kW	79.00 kW
COP Tj = TOL	3.97	2.72
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
РТО	11 W	11 W
PSB	11 W	11 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	No	No
Supplementary Heater: PSUP	0.00 kW	0.00 kW



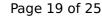


Annual energy consumption Qhe	21524 kWh	23056 kWh	

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	204 %	165 %
Prated	84.67 kW	79.00 kW
SCOP	5.30	4.32
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	51.25 kW	48.52 kW
COP Tj = -7°C	5.06	3.85
Pdh Tj = +2°C	31.20 kW	29.11 kW
COP Tj = +2°C	5.81	4.83
Pdh Tj = +7°C	24.49 kW	24.11 kW
COP Tj = +7°C	5.85	5.20
Pdh Tj = 12°C	24.39 kW	24.22 kW





	<u> </u>	
COP Tj = 12°C	5.66	5.27
Pdh Tj = Tbiv	84.67 kW	79.00 kW
COP Tj = Tbiv	3.97	2.72
Pdh Tj = TOL	84.67 kW	79.00 kW
COP Tj = TOL	3.97	2.72
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
РТО	11 W	11 W
PSB	11 W	11 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	39378 kWh	45048 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	69.37 kW	62.91 kW	
El input	12.10 kW	16.47 kW	
СОР	5.73	3.82	
Indoor water flow rate	11.86 m³/h	6.76 m³/h	

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	277 %	210 %





		ARK database on 17 Dec 202
Prated	66.39 kW	80.95 kW
SCOP	7.12	5.40
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	58.73 kW	71.61 kW
$COP Tj = -7^{\circ}C$	6.01	4.08
Pdh Tj = $+2$ °C	35.75 kW	43.59 kW
COP Tj = +2°C	7.29	5.37
Pdh Tj = $+7^{\circ}$ C	31.01 kW	28.02 kW
$COPTj = +7^{\circ}C$	7.49	6.28
Pdh Tj = 12°C	31.34 kW	31.22 kW
COP Tj = 12°C	7.74	6.48
Pdh Tj = Tbiv	66.39 kW	80.95 kW
COP Tj = Tbiv	5.65	3.71
Pdh Tj = TOL	66.39 kW	80.95 kW
COP Tj = TOL	5.65	3.71
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
РТО	11 W	11 W
PSB	11 W	11 W
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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	19268 kWh	30975 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825		
Low temperature	Medium temperature	
278 %	204 %	
66.39 kW	80.95 kW	
7.16	5.29	
2 °C	2 °C	
2 °C	2 °C	
66.39 kW	80.95 kW	
5.65	3.71	
42.68 kW	52.04 kW	
7.02	4.65	
	Low temperature 278 % 66.39 kW 7.16 2 °C 2 °C 66.39 kW 5.65 42.68 kW	





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Pdh Tj = 12°C	31.13 kW	31.03 kW
COP Tj = 12°C	7.58	6.27
Pdh Tj = Tbiv	66.39 kW	80.95 kW
COP Tj = Tbiv	5.65	3.71
Pdh Tj = TOL	66.39 kW	80.95 kW
COP Tj = TOL	5.65	3.71
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
РТО	11 W	11 W
PSB	11 W	11 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	12392 kWh	20426 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)





EN 14825

	Low temperature	Medium temperature
η_{s}	285 %	215 %
Prated	66.39 kW	80.95 kW
SCOP	7.32	5.57
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	40.18 kW	49.00 kW
COP Tj = -7°C	7.28	5.06
Pdh Tj = +2°C	31.09 kW	29.83 kW
COP Tj = +2°C	7.55	6.11
Pdh Tj = +7°C	31.30 kW	31.18 kW
COP Tj = +7°C	7.70	6.43
Pdh Tj = 12°C	31.16 kW	31.37 kW
COP Tj = 12°C	7.60	6.66
Pdh Tj = Tbiv	66.39 kW	80.95 kW
COP Tj = Tbiv	5.65	3.71
Pdh Tj = TOL	66.39 kW	80.95 kW
COP Tj = TOL	5.65	3.71
Cdh	1.00	1.00
WTOL	65 °C	65 °C



$$\operatorname{\textit{Page}}\xspace$ 25 of 25 This information was generated by the HP KEYMARK database on 17 Dec 2020

Poff	9 W	9 W
РТО	11 W	11 W
PSB	11 W	11 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	22343 kWh	35849 kWh