

This information was generated by the HP KEYMARK database on 7 Jul 2022

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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		
Subtype title	Mega XL		
Heat Pump Type	Brine/Water and Water/Water		
Refrigerant	R410A		
Mass of Refrigerant	9 kg		
Certification Date	10.04.2019		

Model: Thermia Mega XL 2020

Configure model	
Model name	Thermia Mega XL 2020
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	
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
COP	4.71	2.84

Warmer Climate

This information was generated by the HP KEYMARK database on 7 Jul 2022

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
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°C	3.97	2.72
Pdh Tj = +7°C	54.43 kW	50.79 kW
COP Tj = +7°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 or Pdh Tj = Tdesignh if TOL < Tdesignh	84.67 kW	79.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.97	2.72

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$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	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

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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 or Pdh Tj = Tdesignh if TOL < Tdesignh	84.67 kW	79.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.97	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW

This information was generated by the HP KEYMARK database on 7 Jul 2022

Annual energy consumption Q_{he}	39378 kWh	45048 kWh
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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

This information was generated by the HP KEYMARK database on 7 Jul 2022

COP Tj = 12°C	5.65	5.16
Pdh Tj = Tbiv	84.67 kW	79.00 kW
COP Tj = Tbiv	3.97	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	84.67 kW	79.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.97	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	33804 kWh	39457 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
COP	5.73	3.82

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

This information was generated by the HP KEYMARK database on 7 Jul 2022

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°C	7.02	4.65
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 or Pdh Tj = Tdesignh if TOL < Tdesignh	66.39 kW	80.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.65	3.71
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW

This information was generated by the HP KEYMARK database on 7 Jul 2022

Annual energy consumption Q_{he}	12392 kWh	20426 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	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

This information was generated by the HP KEYMARK database on 7 Jul 2022

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 or Pdh Tj = Tdesignh if TOL < Tdesignh	66.39 kW	80.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.65	3.71
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	22343 kWh	35849 kWh

Average Climate

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

EN 14825

This information was generated by the HP KEYMARK database on 7 Jul 2022

	Low temperature	Medium temperature
η_s	277 %	210 %
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°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°C	31.01 kW	28.02 kW
COP Tj = +7°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 or Pdh Tj = Tdesignh if TOL < Tdesignh	66.39 kW	80.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.65	3.71
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W

This information was generated by the HP KEYMARK database on 7 Jul 2022

PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	19268 kWh	30975 kWh

Model: Thermia Mega XL

Configure model	
Model name	Thermia Mega XL
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	
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
COP	4.71	2.84

Warmer Climate

This information was generated by the HP KEYMARK database on 7 Jul 2022

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
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°C	3.97	2.72
Pdh Tj = +7°C	54.43 kW	50.79 kW
COP Tj = +7°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 or Pdh Tj = Tdesignh if TOL < Tdesignh	84.67 kW	79.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.97	2.72

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$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	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

This information was generated by the HP KEYMARK database on 7 Jul 2022

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 or Pdh Tj = Tdesignh if TOL < Tdesignh	84.67 kW	79.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.97	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW

This information was generated by the HP KEYMARK database on 7 Jul 2022

Annual energy consumption Q_{he}	39378 kWh	45048 kWh
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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

This information was generated by the HP KEYMARK database on 7 Jul 2022

COP Tj = 12°C	5.65	5.16
Pdh Tj = Tbiv	84.67 kW	79.00 kW
COP Tj = Tbiv	3.97	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	84.67 kW	79.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.97	2.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	33804 kWh	39457 kWh

Water/Water Heat Pump

Heating

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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
COP	5.73	3.82

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

This information was generated by the HP KEYMARK database on 7 Jul 2022

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°C	7.02	4.65
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 or Pdh Tj = Tdesignh if TOL < Tdesignh	66.39 kW	80.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.65	3.71
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW

This information was generated by the HP KEYMARK database on 7 Jul 2022

Annual energy consumption Q_{he}	12392 kWh	20426 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	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

This information was generated by the HP KEYMARK database on 7 Jul 2022

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 or Pdh Tj = Tdesignh if TOL < Tdesignh	66.39 kW	80.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.65	3.71
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	22343 kWh	35849 kWh

Average Climate

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

EN 14825

This information was generated by the HP KEYMARK database on 7 Jul 2022

	Low temperature	Medium temperature
η_s	277 %	210 %
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°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°C	31.01 kW	28.02 kW
COP Tj = +7°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 or Pdh Tj = Tdesignh if TOL < Tdesignh	66.39 kW	80.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.65	3.71
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	9 W	9 W

This information was generated by the HP KEYMARK database on 7 Jul 2022

PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	19268 kWh	30975 kWh