Subtype Mega L

Certificate Holder	Thermia
Address	Snickaregatan 1
ZIP	
City	Arvika
Country	SE
Certification Body	RISE CERT
Subtype title	Mega L
Registration number	012-SC0834-18
Heat Pump Type	Brine/Water and Water/Water
Refrigerant	R410A
Mass of Refrigerant	6.3 kg
Certification Date	10.04.2019
Testing laboratory	RISE Research Institutes of Sweden

Model Thermia Mega L 2020	
Model name	Thermia Mega L 2020
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Brine/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	34.97 kW	31.56 kW
El input	7.76 kW	11.04 kW
COP	4.51	2.86

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	200 %	155 %
Prated	59.64 kW	55.34 kW
SCOP	5.19	4.07
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	52.76 kW	48.96 kW
COP Tj = -7°C	4.26	3.01
Pdh Tj = +2°C	32.11 kW	29.80 kW
COP Tj = +2°C	5.23	4.11
Pdh Tj = +7°C	20.64 kW	19.16 kW
COP Tj = +7°C	5.74	4.84
Pdh Tj = 12°C	16.56 kW	16.33 kW
COP Tj = 12°C	5.58	4.66
Pdh Tj = Tbiv	59.64 kW	55.34 kW
COP Tj = Tbiv	3.93	2.77

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	59.64 kW	55.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.93	2.77
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	18 W	18 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	23714 kWh	28063 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	204 %	160 %
Prated	59.64 kW	55.34 kW
SCOP	5.29	4.20
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	35.77 kW	33.80 kW
COP Tj = -7°C	5.14	3.85
Pdh Tj = +2°C	21.97 kW	20.39 kW
COP Tj = +2°C	5.71	4.59
Pdh Tj = +7°C	16.74 kW	16.35 kW
COP Tj = +7°C	5.86	4.85
Pdh Tj = 12°C	16.58 kW	16.38 kW
COP Tj = 12°C	5.58	4.88
Pdh Tj = Tbiv	59.64 kW	55.34 kW
COP Tj = Tbiv	3.93	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	59.64 kW	55.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.93	2.77
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	18 W	18 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	27759 kWh	32491 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	203 %	157 %
Prated	59.64 kW	55.34 kW
SCOP	5.28	4.13
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	59.64 kW	55.34 kW
COP Tj = +2°C	3.93	2.77
Pdh Tj = +7°C	38.34 kW	35.58 kW
COP Tj = +7°C	5.00	3.69
Pdh Tj = 12°C	17.04 kW	15.81 kW
COP Tj = 12°C	5.79	4.85
Pdh Tj = Tbiv	59.64 kW	55.34 kW
COP Tj = Tbiv	3.93	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	59.64 kW	55.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.93	2.77
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	18 W	18 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	15055 kWh	17857 kWh

Water/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	48.57 kW	43.13 kW
El input	8.51 kW	11.59 kW
COP	5.71	3.72

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	264 %	206 %
Prated	51.32 kW	53.23 kW
SCOP	6.80	5.35
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	45.39 kW	47.08 kW
COP Tj = -7°C	5.63	3.98
Pdh Tj = +2°C	27.63 kW	28.66 kW
COP Tj = +2°C	6.92	5.43
Pdh Tj = +7°C	21.64 kW	21.02 kW
COP Tj = +7°C	7.32	6.08
Pdh Tj = 12°C	21.70 kW	21.25 kW
COP Tj = 12°C	7.45	6.43
Pdh Tj = Tbiv	51.32 kW	53.23 kW
COP Tj = Tbiv	5.35	3.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	51.32 kW	53.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.35	3.65
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	18 W	18 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	15600 kWh	20546 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	272 %	215 %
Prated	51.32 kW	53.23 kW
SCOP	6.99	5.57
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	31.06 kW	32.22 kW
COP Tj = -7°C	6.78	5.15
Pdh Tj = +2°C	21.66 kW	19.61 kW
COP Tj = +2°C	7.37	6.08
Pdh Tj = +7°C	21.70 kW	21.22 kW
COP Tj = +7°C	7.45	6.37
Pdh Tj = 12°C	21.65 kW	21.36 kW
COP Tj = 12°C	7.34	6.60
Pdh Tj = Tbiv	51.32 kW	53.23 kW
COP Tj = Tbiv	5.35	3.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	51.32 kW	53.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.35	3.65
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	18 W	18 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	18086 kWh	23548 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	265 %	207 %
Prated	51.32 kW	53.23 kW
SCOP	6.83	5.38
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	51.32 kW	53.23 kW
COP Tj = +2°C	5.35	3.65
Pdh Tj = +7°C	32.99 kW	34.22 kW
COP Tj = +7°C	6.59	4.90

Pdh Tj = 12°C	21.67 kW	21.11 kW
COP Tj = 12°C	7.37	6.21
Pdh Tj = Tbiv	51.32 kW	53.23 kW
COP Tj = Tbiv	5.35	3.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	51.32 kW	53.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.35	3.65
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	18 W	18 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	10032 kWh	13221 kWh

Model Thermia Mega L	
Model name	Thermia Mega L
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Brine/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	34.97 kW	31.56 kW
El input	7.76 kW	11.04 kW
COP	4.51	2.86

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	200 %	155 %
Prated	59.64 kW	55.34 kW
SCOP	5.19	4.07
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	52.76 kW	48.96 kW
COP Tj = -7°C	4.26	3.01
Pdh Tj = +2°C	32.11 kW	29.80 kW
COP Tj = +2°C	5.23	4.11
Pdh Tj = +7°C	20.64 kW	19.16 kW
COP Tj = +7°C	5.74	4.84
Pdh Tj = 12°C	16.56 kW	16.33 kW
COP Tj = 12°C	5.58	4.66
Pdh Tj = Tbiv	59.64 kW	55.34 kW
COP Tj = Tbiv	3.93	2.77

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	59.64 kW	55.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.93	2.77
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	18 W	18 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	23714 kWh	28063 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	204 %	160 %
Prated	59.64 kW	55.34 kW
SCOP	5.29	4.20
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	35.77 kW	33.80 kW
COP Tj = -7°C	5.14	3.85
Pdh Tj = +2°C	21.97 kW	20.39 kW
COP Tj = +2°C	5.71	4.59
Pdh Tj = +7°C	16.74 kW	16.35 kW
COP Tj = +7°C	5.86	4.85
Pdh Tj = 12°C	16.58 kW	16.38 kW
COP Tj = 12°C	5.58	4.88
Pdh Tj = Tbiv	59.64 kW	55.34 kW
COP Tj = Tbiv	3.93	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	59.64 kW	55.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.93	2.77
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	18 W	18 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	27759 kWh	32491 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	203 %	157 %
Prated	59.64 kW	55.34 kW
SCOP	5.28	4.13
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	59.64 kW	55.34 kW
COP Tj = +2°C	3.93	2.77
Pdh Tj = +7°C	38.34 kW	35.58 kW
COP Tj = +7°C	5.00	3.69
Pdh Tj = 12°C	17.04 kW	15.81 kW
COP Tj = 12°C	5.79	4.85
Pdh Tj = Tbiv	59.64 kW	55.34 kW
COP Tj = Tbiv	3.93	2.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	59.64 kW	55.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.93	2.77
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	18 W	18 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	15055 kWh	17857 kWh

Water/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	48.57 kW	43.13 kW
El input	8.51 kW	11.59 kW
COP	5.71	3.72

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	264 %	206 %
Prated	51.32 kW	53.23 kW
SCOP	6.80	5.35
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	45.39 kW	47.08 kW
COP Tj = -7°C	5.63	3.98
Pdh Tj = +2°C	27.63 kW	28.66 kW
COP Tj = +2°C	6.92	5.43
Pdh Tj = +7°C	21.64 kW	21.02 kW
COP Tj = +7°C	7.32	6.08
Pdh Tj = 12°C	21.70 kW	21.25 kW
COP Tj = 12°C	7.45	6.43
Pdh Tj = Tbiv	51.32 kW	53.23 kW
COP Tj = Tbiv	5.35	3.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	51.32 kW	53.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.35	3.65
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	18 W	18 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	15600 kWh	20546 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	272 %	215 %
Prated	51.32 kW	53.23 kW
SCOP	6.99	5.57
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	31.06 kW	32.22 kW
COP Tj = -7°C	6.78	5.15
Pdh Tj = +2°C	21.66 kW	19.61 kW
COP Tj = +2°C	7.37	6.08
Pdh Tj = +7°C	21.70 kW	21.22 kW
COP Tj = +7°C	7.45	6.37
Pdh Tj = 12°C	21.65 kW	21.36 kW
COP Tj = 12°C	7.34	6.60
Pdh Tj = Tbiv	51.32 kW	53.23 kW
COP Tj = Tbiv	5.35	3.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	51.32 kW	53.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.35	3.65
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	18 W	18 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	18086 kWh	23548 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	265 %	207 %
Prated	51.32 kW	53.23 kW
SCOP	6.83	5.38
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	51.32 kW	53.23 kW
COP Tj = +2°C	5.35	3.65
Pdh Tj = +7°C	32.99 kW	34.22 kW
COP Tj = +7°C	6.59	4.90

Pdh Tj = 12°C	21.67 kW	21.11 kW
COP Tj = 12°C	7.37	6.21
Pdh Tj = Tbiv	51.32 kW	53.23 kW
COP Tj = Tbiv	5.35	3.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	51.32 kW	53.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.35	3.65
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	18 W	18 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	10032 kWh	13221 kWh