

Subtype Thermia Mega ECO XL

Certificate Holder	Thermia
Address	Snickaregatan 1
ZIP	
City	Arvika
Country	SE
Certification Body	RISE CERT
Subtype title	Thermia Mega ECO XL
Registration number	012-C700189
Heat Pump Type	Brine/Water
Refrigerant	R454B
Mass of Refrigerant	8.8 kg
Certification Date	22.09.2023
Testing basis	EN 14511:2018, EN 14825:2016, EN 12102:2017.

Model Thermia Mega ECO XL 400V

Model name	Thermia Mega ECO XL 400V
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Colder, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Brine/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	202 %	159 %
Prated	84.07 kW	81.29 kW
SCOP	5.25	4.18
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	74.37 kW	71.91 kW
COP Tj = -7°C	4.23	3.15
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	45.27 kW	43.77 kW
COP Tj = +2°C	5.26	4.15
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	29.10 kW	28.14 kW
COP Tj = +7°C	5.95	4.91
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	22.80 kW	23.00 kW
COP Tj = 12°C	5.72	4.94
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	84.07 kW	81.29 kW
COP Tj = Tbiv	3.95	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	84.07 kW	81.29 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.95	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	65 °C	65 °C
Poff	12 W	12 W
PTO	12 W	12 W
PSB	12 W	12 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	33054 kWh	40141 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	209 %	166 %
Prated	84.07 kW	81.29 kW
SCOP	5.44	4.35
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	50.89 kW	49.20 kW
COP Tj = -7°C	5.11	3.92
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	30.97 kW	29.95 kW
COP Tj = +2°C	5.91	4.84
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	22.81 kW	23.10 kW
COP Tj = +7°C	5.80	5.00
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	22.79 kW	23.19 kW
COP Tj = 12°C	5.58	5.06
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	84.07 kW	81.29 kW
COP Tj = Tbiv	3.95	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	84.07 kW	81.29 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.95	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	65 °C	65 °C
Poff	12 W	12 W

PTO	12 W	12 W
PSB	12 W	12 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 Q _{he}	38123 kWh	46029 kWh