Subtype Thermia Atlas 18

Certificate Holder	Thermia
Address	Snickaregatan 1
ZIP	
City	Arvika
Country	SE
Certification Body	RISE CERT
Subtype title	Thermia Atlas 18
Registration number	012-C700008
Heat Pump Type	Brine/Water and Water/Water
Refrigerant	R410A
Mass of Refrigerant	1.95 kg
Certification Date	02.03.2020
Testing basis	HP Keymark Scheme Rules rev 7
Testing laboratory	RISE Research Institutes of Sweden

Model ATLAS 18 400V

Model name	ATLAS 18 400V
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	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
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	7.82 kW	15.68 kW
El input	1.57 kW	5.19 kW
COP	4.98	3.02

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	228 %	168 %
Prated	15.05 kW	15.68 kW
SCOP	5.90	4.40
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.31 kW	13.87 kW
COP Tj = -7°C	5.04	3.38
Cdh Tj = -7 °C	0.99	1.00
Pdh Tj = +2°C	8.10 kW	8.44 kW
COP Tj = +2°C	5.91	4.42
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.21 kW	5.43 kW
COP Tj = +7°C	6.65	5.10

Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.41 kW	4.34 kW
COP Tj = 12°C	6.49	5.25
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	15.05 kW	15.68 kW
COP Tj = Tbiv	4.69	3.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.05 kW	15.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.69	3.02
WTOL	65 °C	65 °C
Poff	15 W	15 W
PTO	16 W	16 W
PSB	16 W	16 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	5270 kWh	7367 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	238 %	174 %
Prated	15.05 kW	15.68 kW
SCOP	6.15	4.55
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	9.11 kW	9.49 kW
COP Tj = -7°C	5.93	4.22
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	5.54 kW	5.78 kW
COP Tj = +2°C	6.61	4.97
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	4.42 kW	4.35 kW
COP Tj = +7°C	6.58	5.32
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	4.39 kW	4.36 kW
COP Tj = 12°C	6.30	5.36
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	15.05 kW	15.68 kW
COP Tj = Tbiv	4.69	3.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.05 kW	15.68 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.69	3.02
WTOL	65 °C	65 °C
Poff	15 W	15 W
PTO	16 W	16 W
PSB	16 W	16 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	6027 kWh	8487 kWh

Water/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	12.52 kW	17.55 kW
El input	1.87 kW	4.59 kW
COP	6.68	3.82

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	319 %	223 %
Prated	12.52 kW	17.55 kW
SCOP	8.18	5.78
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.07 kW	15.53 kW
COP Tj = -7°C	7.10	4.23
Cdh Tj = -7 °C	0.99	1.00
Pdh Tj = +2°C	6.74 kW	9.45 kW
COP Tj = +2°C	8.44	5.84
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	5.85 kW	6.08 kW
COP Tj = +7°C	8.98	6.90
Cdh Tj = +7 °C	0.98	0.98

Pdh Tj = 12°C	5.89 kW	5.72 kW
COP Tj = 12°C	9.30	7.07
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	12.52 kW	17.55 kW
COP Tj = Tbiv	6.68	3.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.52 kW	17.55 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.68	3.82
WTOL	65 °C	65 °C
Poff	15 W	15 W
PTO	16 W	16 W
PSB	16 W	16 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	3160 kWh	6273 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	332 %	232 %
Prated	12.52 kW	17.55 kW
SCOP	8.49	6.01
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.58 kW	10.62 kW
COP Tj = -7°C	8.34	5.49
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	5.86 kW	6.47 kW
COP Tj = +2°C	9.06	6.68
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	5.88 kW	5.72 kW
COP Tj = +7°C	9.26	7.08
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.87 kW	5.75 kW
COP Tj = 12°C	9.12	7.29
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	12.52 kW	17.55 kW
COP Tj = Tbiv	6.68	3.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.52 kW	17.55 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.68	3.82
WTOL	65 °C	65 °C
Poff	15 W	15 W
PTO	16 W	16 W
PSB	16 W	16 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	3633 kWh	7199 kWh

Model ATLAS 18 DUO 400V

Model name	ATLAS 18 DUO 400V
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	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
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	7.82 kW	15.68 kW
El input	1.57 kW	5.19 kW
COP	4.98	3.02

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	228 %	168 %
Prated	15.05 kW	15.68 kW
SCOP	5.90	4.40
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Pdh Tj = +7°C	5.21 kW	5.43 kW
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.05 kW	15.68 kW
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WTOL	65 °C	65 °C
Poff	15 W	15 W
PTO	16 W	16 W
PSB	16 W	16 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	5270 kWh	7367 kWh

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EN 14825 | Colder Climate

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Supplementary Heater: PSUP	0.00 kW	0.00 kW
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COP Tj = +2°C	8.44	5.84
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COP Tj = +7°C	8.98	6.90
Cdh Tj = +7 °C	0.98	0.98

Pdh Tj = 12°C	5.89 kW	5.72 kW
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3160 kWh	6273 kWh

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COP Tj = Tbiv	6.68	3.82
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WTOL	65 °C	65 °C
Poff	15 W	15 W
PTO	16 W	16 W
PSB	16 W	16 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	3633 kWh	7199 kWh