

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

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
η_s	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
η_s	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 $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	6.68	3.82
WTOL	65 °C	65 °C
P _{off}	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 Q _{he}	3633 kWh	7199 kWh

Model ATLAS 18 DUO 400V

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Application	Heating (medium temp)
Units	Indoor
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Cooling mode application (optional)	n/a
Any additional heat sources	n/a

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Supplementary Heater: PSUP	0.00 kW	0.00 kW
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