

This information was generated by the HP KEYMARK database on 17 Dec 2020

Summary of	Thermia Atlas 18	Reg. No.	012-C700008
Certificate Holder			
Name	Thermia		
Address	Snickaregatan 1	Zip	
City	Arvika	Country	Sweden
Certification Body	RISE CERT		
Name of testing laboratory	RISE		
Subtype title	Thermia Atlas 18		
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

### General Data

Power supply	3x400V 50Hz
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Brine/Water Heat Pump

### Heating

#### EN 14511-4

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

#### EN 14511-2

	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
Indoor water flow rate	1.36 m <sup>3</sup> /h	1.74 m <sup>3</sup> /h

### Average Climate

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### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	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	0.99	1.00
Pdh Tj = +2°C	8.10 kW	8.44 kW
COP Tj = +2°C	5.91	4.42
Cdh	0.99	0.99
Pdh Tj = +7°C	5.21 kW	5.43 kW
COP Tj = +7°C	6.65	5.10
Cdh	0.98	0.99
Pdh Tj = 12°C	4.41 kW	4.34 kW

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COP Tj = 12°C	6.49	5.25
Cdh	0.98	0.98
Pdh Tj = Tbiv	15.05 kW	15.68 kW
COP Tj = Tbiv	4.69	3.02
Pdh Tj = TOL	15.05 kW	15.68 kW
COP Tj = TOL	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

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

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$\eta_s$	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	0.99	0.99
Pdh Tj = +2°C	5.54 kW	5.78 kW
COP Tj = +2°C	6.61	4.97
Cdh	0.98	0.99
Pdh Tj = +7°C	4.42 kW	4.35 kW
COP Tj = +7°C	6.58	5.32
Cdh	0.98	0.98
Pdh Tj = 12°C	4.39 kW	4.36 kW
COP Tj = 12°C	6.30	5.36
Cdh	0.98	0.98
Pdh Tj = Tbiv	15.05 kW	15.68 kW
COP Tj = Tbiv	4.69	3.02
Pdh Tj = TOL	15.05 kW	15.68 kW

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COP Tj = TOL	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 Heat Pump

## Heating

<b>EN 14511-4</b>	
Starting and operating test	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

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<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	12.52 kW	17.55 kW
El input	1.87 kW	4.59 kW
COP	6.68	3.82
Indoor water flow rate	2.20 m <sup>3</sup> /h	1.94 m <sup>3</sup> /h

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	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

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Cdh	0.99	1.00
Pdh Tj = +2°C	6.74 kW	9.45 kW
COP Tj = +2°C	8.44	5.84
Cdh	0.98	0.99
Pdh Tj = +7°C	5.85 kW	6.08 kW
COP Tj = +7°C	8.98	6.90
Cdh	0.98	0.98
Pdh Tj = 12°C	5.89 kW	5.72 kW
COP Tj = 12°C	9.30	7.07
Cdh	0.97	0.98
Pdh Tj = Tbiv	12.52 kW	17.55 kW
COP Tj = Tbiv	6.68	3.82
Pdh Tj = TOL	12.52 kW	17.55 kW
COP Tj = TOL	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



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Annual energy consumption $Q_{he}$	3160 kWh	6273 kWh
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## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	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	0.98	0.99
Pdh Tj = +2°C	5.86 kW	6.47 kW
COP Tj = +2°C	9.06	6.68
Cdh	0.97	0.98
Pdh Tj = +7°C	5.88 kW	5.72 kW

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COP Tj = +7°C	9.26	7.08
Cdh	0.97	0.98
Pdh Tj = 12°C	5.87 kW	5.75 kW
COP Tj = 12°C	9.12	7.29
Cdh	0.97	0.98
Pdh Tj = Tbiv	12.52 kW	17.55 kW
COP Tj = Tbiv	6.68	3.82
Pdh Tj = TOL	12.52 kW	17.55 kW
COP Tj = TOL	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

### General Data

Power supply	3x400V 50Hz
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Brine/Water Heat Pump

### Heating

#### EN 14511-4

Starting and operating test	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
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	Low temperature	Medium temperature
Heat output	7.82 kW	15.68 kW
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PTO	16 W	16 W
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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

## Colder Climate

<b>EN 12102-1</b>		
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Supplementary Heater: PSUP	0.00 kW	0.00 kW

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COP Tj = TOL	6.68	3.82
WTOL	65 °C	65 °C
Poff	15 W	15 W
PTO	16 W	16 W
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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