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Login

Summary of	Thermia Atlas 12	Reg. No.	012-C700006	
Certificate Holder				
Name	Thermia			
Address	Snickaregatan 1	Zip		
City	Arvika	Country	Sweden	
Certification Body	RISE CERT			
Subtype title	Thermia Atlas 12			
Heat Pump Type	Brine/Water and Water/Water			
Refrigerant	R410A			
Mass of Refrigerant	1.4 kg			
Certification Date	02.03.2020			
Testing basis	HP Keymark Scheme Rules rev 7			



Model: ATLAS 12 400V

Configure model		
Model name	ATLAS 12 400V	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

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	5.24 kW	4.78 kW	
El input	1.10 kW	1.68 kW	
СОР	4.75	2.85	

Average Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	33 dB(A)	33 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	222 %	162 %
Prated	11.49 kW	10.48 kW
SCOP	5.75	4.25
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.17 kW	9.27 kW
COP Tj = -7°C	4.82	3.24
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.19 kW	5.64 kW
COP Tj = +2°C	5.95	4.30
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	3.98 kW	3.63 kW
COP Tj = +7°C	6.50	5.02
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.81 kW	2.77 kW





COP Tj = 12°C	5.70	4.91
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	11.49 kW	10.48 kW
COP Tj = Tbiv	4.38	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.49 kW	10.48 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.38	2.91
WTOL	65 °C	65 °C
Poff	15 W	15 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4131 kWh	5097 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	33 dB(A)	33 dB(A)	

EN 14825		
	Low temperature	Medium temperature





	·	With ducasuse on 10 Mar 20
η_{s}	226 %	167 %
Prated	11.49 kW	10.48 kW
SCOP	5.86	4.39
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.96 kW	6.34 kW
COP Tj = -7°C	5.64	3.96
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	4.23 kW	3.86 kW
COP Tj = +2°C	6.48	4.91
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.72 kW	2.48 kW
$COPTj = +7^{\circ}C$	5.93	5.22
Cdh Tj = +7 °C	0.97	0.97
Pdh Tj = 12°C	2.80 kW	2.77 kW
COP Tj = 12°C	5.49	5.06
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	11.49 kW	10.48 kW
COP Tj = Tbiv	4.38	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.49 kW	10.48 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.38	2.91
WTOL	65 °C	65 °C
Poff	15 W	15 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4838 kWh	5887 kWh

Water/Water Heat Pump

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	10.16 kW	12.54 kW
El input	1.56 kW	3.76 kW
СОР	6.52	3.33

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperatur	e Medium temperature
η_{s}	334 %	217 %
Prated	10.16 kW	12.54 kW
SCOP	8.55	5.62
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.99 kW	11.10 kW
COP Tj = -7°C	6.95	4.20
Cdh Tj = -7 °C	0.99	0.99
		·





Pdh Tj = +2°C	5.47 kW	6.75 kW
$COP Tj = +2^{\circ}C$	8.85	5.75
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	3.52 kW	4.34 kW
$COP Tj = +7^{\circ}C$	10.21	6.70
Cdh Tj = +7 °C	0.96	0.98
Pdh Tj = 12°C	3.85 kW	3.75 kW
COP Tj = 12°C	8.73	6.41
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	10.16 kW	12.54 kW
COP Tj = Tbiv	6.52	3.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.16 kW	12.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.52	3.33
WTOL	65 °C	65 °C
Poff	15 W	15 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2454 kWh	4615 kWh



Colder Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	346 %	226 %
Prated	10.16 kW	12.54 kW
SCOP	8.86	5.84
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.15 kW	7.59 kW
COP Tj = -7°C	8.54	5.41
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	3.74 kW	4.62 kW
COP Tj = +2°C	10.08	6.70
Cdh Tj = +2 °C	0.96	0.98
Pdh Tj = +7°C	3.85 kW	3.76 kW
$COP Tj = +7^{\circ}C$	8.77	6.47
Cdh Tj = +7 °C	0.96	0.97



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Pdh Tj = 12°C	3.83 kW	3.78 kW
COP Tj = 12°C	8.49	6.62
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	10.16 kW	12.54 kW
COP Tj = Tbiv	6.52	3.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.16 kW	12.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.52	3.33
WTOL	65 °C	65 °C
Poff	15 W	15 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2827 kWh	5291 kWh



Model: ATLAS 12 DUO 400V

Configure model		
Model name	ATLAS 12 DUO 400V	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

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	5.24 kW	4.78 kW
El input	1.10 kW	1.68 kW
СОР	4.75	2.85

Average Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	34 dB(A)	34 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	222 %	162 %
Prated	11.49 kW	10.48 kW
SCOP	5.75	4.25
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.17 kW	9.27 kW
COP Tj = -7°C	4.82	3.24
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.19 kW	5.64 kW
COP Tj = +2°C	5.95	4.30
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	3.98 kW	3.63 kW
COP Tj = +7°C	6.50	5.02
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.81 kW	2.77 kW



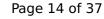


COP Tj = 12°C	5.70	4.91
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	11.49 kW	10.48 kW
COP Tj = Tbiv	4.38	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.49 kW	10.48 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.38	2.91
WTOL	65 °C	65 °C
Poff	15 W	15 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4131 kWh	5097 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	34 dB(A)	34 dB(A)	

EN 14825		
	Low temperature	Medium temperature





η_{s}	226 %	167 %
Prated	11.49 kW	10.48 kW
SCOP	5.86	4.39
Tbiv	-22 °C	-22 °C
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Pdh Tj = -7°C	6.96 kW	6.34 kW
COP Tj = -7°C	5.64	3.96
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.23 kW	3.86 kW
$COP Tj = +2^{\circ}C$	6.48	4.91
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.72 kW	2.48 kW
COP Tj = +7°C	5.93	5.22
Cdh Tj = +7 °C	0.97	0.97
Pdh Tj = 12°C	2.80 kW	2.77 kW
COP Tj = 12°C	5.49	5.06
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	11.49 kW	10.48 kW
COP Tj = Tbiv	4.38	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.49 kW	10.48 kW



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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.38	2.91
WTOL	65 °C	65 °C
Poff	15 W	15 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4838 kWh	5887 kWh

Water/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	

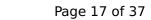


EN 14511-2			
Low temperature Medium temperature			
Heat output	10.16 kW	12.54 kW	
El input	1.56 kW	3.76 kW	
СОР	6.52	3.33	

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	34 dB(A)	34 dB(A)	

EN 14825		
Low temperature	Medium temperature	
334 %	217 %	
10.16 kW	12.54 kW	
8.55	5.62	
-10 °C	-10 °C	
-10 °C	-10 °C	
8.99 kW	11.10 kW	
6.95	4.20	
0.99	0.99	
	Low temperature 334 % 10.16 kW 8.55 -10 °C -10 °C 8.99 kW 6.95	





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Pdh Tj = +2°C	5.47 kW	6.75 kW
$COP Tj = +2^{\circ}C$	8.85	5.75
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	3.52 kW	4.34 kW
$COP Tj = +7^{\circ}C$	10.21	6.70
Cdh Tj = +7 °C	0.96	0.98
Pdh Tj = 12°C	3.85 kW	3.75 kW
COP Tj = 12°C	8.73	6.41
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	10.16 kW	12.54 kW
COP Tj = Tbiv	6.52	3.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.16 kW	12.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.52	3.33
WTOL	65 °C	65 °C
Poff	15 W	15 W
РТО	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	2454 kWh	4615 kWh
1		



Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	34 dB(A)	34 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	346 %	226 %
Prated	10.16 kW	12.54 kW
SCOP	8.86	5.84
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.15 kW	7.59 kW
COP Tj = -7°C	8.54	5.41
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	3.74 kW	4.62 kW
COP Tj = +2°C	10.08	6.70
Cdh Tj = +2 °C	0.96	0.98
Pdh Tj = +7°C	3.85 kW	3.76 kW
COP Tj = +7°C	8.77	6.47
Cdh Tj = +7 °C	0.96	0.97



Pdh Tj = 12°C	3.83 kW	3.78 kW
COP Tj = 12°C	8.49	6.62
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	10.16 kW	12.54 kW
COP Tj = Tbiv	6.52	3.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.16 kW	12.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.52	3.33
WTOL	65 °C	65 °C
Poff	15 W	15 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2827 kWh	5291 kWh



Model: ATLAS 12 230V

Configure model		
Model name	ATLAS 12 230V	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data	
Power supply 1x230V 50Hz	

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	5.24 kW	4.78 kW
El input	1.10 kW	1.68 kW
СОР	4.75	2.85

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	222 %	162 %
Prated	11.49 kW	10.48 kW
SCOP	5.75	4.25
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.17 kW	9.27 kW
COP Tj = -7°C	4.82	3.24
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Pdh Tj = +2°C	6.19 kW	5.64 kW
COP Tj = +2°C	5.95	4.30
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	3.98 kW	3.63 kW
COP Tj = +7°C	6.50	5.02
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.81 kW	2.77 kW





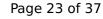
$$\operatorname{\textit{Page}}\xspace$ 22 of 37 This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C 5.70 4.91 Cdh Tj = +12 °C 0.97 0.97 Pdh Tj = Tbiv 11.49 kW 10.48 kW COP Tj = Tbiv 4.38 2.91 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 11.49 kW 10.48 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 4.38 2.91 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 4131 kWh 5097 kWh			
Pdh Tj = Tbiv 11.49 kW 10.48 kW COP Tj = Tbiv 4.38 2.91 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	COP Tj = 12°C	5.70	4.91
COP Tj = Tbiv 4.38 2.91 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = Tbiv	11.49 kW	10.48 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	COP Tj = Tbiv	4.38	2.91
WTOL 65 °C 65 °C Poff 15 W 15 W PTO 16 W 16 W PSB 16 W 0 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.00 kW 0.00 kW	Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.49 kW	10.48 kW
Poff 15 W 15 W PTO 16 W 16 W PSB 16 W 0 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.00 kW 0.00 kW	COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.38	2.91
PTO 16 W 16 W 16 W PSB 16 W 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.00 kW	WTOL	65 °C	65 °C
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	Poff	15 W	15 W
PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.00 kW 0.00 kW	РТО	16 W	16 W
Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.00 kW 0.00 kW	PSB	16 W	16 W
Supplementary Heater: PSUP 0.00 kW 0.00 kW	PCK	o w	o w
	Supplementary Heater: Type of energy input	Electricity	Electricity
Annual energy consumption Qhe 4131 kWh 5097 kWh	Supplementary Heater: PSUP	0.00 kW	0.00 kW
	Annual energy consumption Qhe	4131 kWh	5097 kWh

Colder Climate

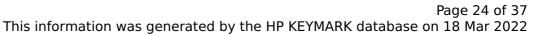
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)

EN 1482	25	
	Low temperature	Medium temperature





η_{s}	226 %	167 %
Prated	11.49 kW	10.48 kW
SCOP	5.86	4.39
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.96 kW	6.34 kW
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Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.23 kW	3.86 kW
$COP Tj = +2^{\circ}C$	6.48	4.91
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.72 kW	2.48 kW
COP Tj = +7°C	5.93	5.22
Cdh Tj = +7 °C	0.97	0.97
Pdh Tj = 12°C	2.80 kW	2.77 kW
COP Tj = 12°C	5.49	5.06
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	11.49 kW	10.48 kW
COP Tj = Tbiv	4.38	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.49 kW	10.48 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.38	2.91
WTOL	65 °C	65 °C
Poff	15 W	15 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4838 kWh	5887 kWh

Water/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

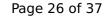


EN 14511-2		
	Low temperature	Medium temperature
Heat output	10.16 kW	12.54 kW
El input	1.56 kW	3.76 kW
СОР	6.52	3.33

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)

EN 14825		
Low temperature	Medium temperature	
334 %	217 %	
10.16 kW	12.54 kW	
8.55	5.62	
-10 °C	-10 °C	
-10 °C	-10 °C	
8.99 kW	11.10 kW	
6.95	4.20	
0.99	0.99	
	Low temperature 334 % 10.16 kW 8.55 -10 °C -10 °C 8.99 kW 6.95	





This information was genera	ted by the HE KETMAN	TK database on 10 Mai 2022
Pdh Tj = +2°C	5.47 kW	6.75 kW
$COP Tj = +2^{\circ}C$	8.85	5.75
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = $+7^{\circ}$ C	3.52 kW	4.34 kW
$COPTj = +7^{\circ}C$	10.21	6.70
Cdh Tj = +7 °C	0.96	0.98
Pdh Tj = 12°C	3.85 kW	3.75 kW
COP Tj = 12°C	8.73	6.41
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	10.16 kW	12.54 kW
COP Tj = Tbiv	6.52	3.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.16 kW	12.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.52	3.33
WTOL	65 °C	65 °C
Poff	15 W	15 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2454 kWh	4615 kWh



Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	346 %	226 %
Prated	10.16 kW	12.54 kW
SCOP	8.86	5.84
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.15 kW	7.59 kW
COP Tj = -7 °C	8.54	5.41
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = $+2$ °C	3.74 kW	4.62 kW
$COP Tj = +2^{\circ}C$	10.08	6.70
Cdh Tj = +2 °C	0.96	0.98
Pdh Tj = $+7^{\circ}$ C	3.85 kW	3.76 kW
$COP Tj = +7^{\circ}C$	8.77	6.47
Cdh Tj = +7 °C	0.96	0.97



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This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	3.83 kW	3.78 kW
COP Tj = 12°C	8.49	6.62
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	10.16 kW	12.54 kW
COP Tj = Tbiv	6.52	3.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.16 kW	12.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.52	3.33
WTOL	65 °C	65 °C
Poff	15 W	15 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2827 kWh	5291 kWh



Model: ATLAS 12 DUO 230V

Configure model		
Model name	ATLAS 12 DUO 230V	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data	
Power supply	1x230V 50Hz

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	5.24 kW	4.78 kW		
El input	1.10 kW	1.68 kW		
СОР	4.75	2.85		

Average Climate



EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	34 dB(A)	34 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	222 %	162 %
Prated	11.49 kW	10.48 kW
SCOP	5.75	4.25
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.17 kW	9.27 kW
COP Tj = -7°C	4.82	3.24
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.19 kW	5.64 kW
COP Tj = +2°C	5.95	4.30
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	3.98 kW	3.63 kW
COP Tj = +7°C	6.50	5.02
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.81 kW	2.77 kW



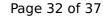


COP Tj = 12°C	5.70	4.91
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	11.49 kW	10.48 kW
COP Tj = Tbiv	4.38	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.49 kW	10.48 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.38	2.91
WTOL	65 °C	65 °C
Poff	15 W	15 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4131 kWh	5097 kWh

Colder Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	34 dB(A)	34 dB(A)	

EN 14825		
	Low temperature	Medium temperature





η_{s}	226 %	167 %
Prated	11.49 kW	10.48 kW
SCOP	5.86	4.39
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.96 kW	6.34 kW
COP Tj = -7°C	5.64	3.96
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.23 kW	3.86 kW
$COP Tj = +2^{\circ}C$	6.48	4.91
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.72 kW	2.48 kW
COP Tj = +7°C	5.93	5.22
Cdh Tj = +7 °C	0.97	0.97
Pdh Tj = 12°C	2.80 kW	2.77 kW
COP Tj = 12°C	5.49	5.06
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	11.49 kW	10.48 kW
COP Tj = Tbiv	4.38	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.49 kW	10.48 kW



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This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.38	2.91
WTOL	65 °C	65 °C
Poff	15 W	15 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4838 kWh	5887 kWh

Water/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	10.16 kW	12.54 kW		
El input	1.56 kW	3.76 kW		
СОР	6.52	3.33		

Average Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	34 dB(A)	34 dB(A)	

EN 14825			
Low temperature	Medium temperature		
334 %	217 %		
10.16 kW	12.54 kW		
8.55	5.62		
-10 °C	-10 °C		
-10 °C	-10 °C		
8.99 kW	11.10 kW		
6.95	4.20		
0.99	0.99		
	Low temperature 334 % 10.16 kW 8.55 -10 °C -10 °C 8.99 kW 6.95		





This information was generated	ated by the HP KEYMA	RK database on 18 Mar 202
Pdh Tj = +2°C	5.47 kW	6.75 kW
COP Tj = +2°C	8.85	5.75
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	3.52 kW	4.34 kW
$COP Tj = +7^{\circ}C$	10.21	6.70
Cdh Tj = +7 °C	0.96	0.98
Pdh Tj = 12°C	3.85 kW	3.75 kW
COP Tj = 12°C	8.73	6.41
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	10.16 kW	12.54 kW
COP Tj = Tbiv	6.52	3.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	10.16 kW	12.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.52	3.33
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	2454 kWh	4615 kWh



Colder Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	34 dB(A)	34 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
η_{s}	346 %	226 %	
Prated	10.16 kW	12.54 kW	
SCOP	8.86	5.84	
Tbiv	-22 °C	-22 °C	
TOL	-22 °C	-22 °C	
Pdh Tj = -7°C	6.15 kW	7.59 kW	
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Cdh Tj = -7 °C	0.98	0.99	
Pdh Tj = +2°C	3.74 kW	4.62 kW	
COP Tj = +2°C	10.08	6.70	
Cdh Tj = +2 °C	0.96	0.98	
Pdh Tj = +7°C	3.85 kW	3.76 kW	
COP Tj = +7°C	8.77	6.47	
Cdh Tj = +7 °C	0.96	0.97	



$$\operatorname{\textit{Page}}\xspace$ 37 of 37 This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	3.83 kW	3.78 kW
COP Tj = 12°C	8.49	6.62
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	10.16 kW	12.54 kW
COP Tj = Tbiv	6.52	3.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.16 kW	12.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.52	3.33
WTOL	65 °C	65 °C
Poff	15 W	15 W
РТО	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	2827 kWh	5291 kWh