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Login

Summary of	Vitocal 2xx-S ODU3	Reg. No.	011-1W0201	
Certificate Holder				
Name	Viessmann Wärmepumpen GmbH			
Address	Viessmannstr. 1	Zip	35107	
City	Allendorf/Eder	Country	Germany	
Certification Body	DIN CERTCO Gesellschaft für Konfo	rmitätsbewertun	g mbH	
Subtype title	Vitocal 2xx-S ODU3			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R410A			
Mass of Refrigerant	3.6 kg			



Model: Vitocal 200-S AWB-M-E-AC 201.D10

Configure model		
Model name	Vitocal 200-S AWB-M-E-AC 201.D10	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Average Climate

Low temperature 176 % 9.32 kW	Medium temperature 129 % 9.35 kW
9.32 kW	
	9.35 kW
4.47	3.29
-7 °C	-7 °C
-20 °C	-20 °C
8.25 kW	8.27 kW
3.24	2.26
5.32 kW	6.07 kW
4.32	3.15
6.60 kW	5.37 kW
5.81	4.21
	-7 °C -20 °C 8.25 kW 3.24 5.32 kW 4.32 6.60 kW





COP Tj = 12°C 7.51 5.70 Pdh Tj = Tbiv 8.25 kW 8.27 kW COP Tj = Tbiv 3.24 2.26 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 7.51 kW 8.04 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.90 2.04 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 0.98 0.99 WTOL 60 °C 60 °C Poff 50 W 50 W PTO 0 W 0 W 25 W 25 W 25 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.86 kW 1.36 kW	Time investment was general		
Pdh Tj = Tbiv 8.25 kW 8.27 kW COP Tj = Tbiv 3.24 2.26 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = 12°C	6.63 kW	6.41 kW
COP Tj = Tbiv 3.24 2.26 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	COP Tj = 12°C	7.51	5.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 7.51 kW 8.04 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.90 2.04 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 0.98 WTOL 60 °C 60 °C Poff 50 W 90 W PTO 0 W PSB 25 W 25 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.86 kW 1.36 kW	Pdh Tj = Tbiv	8.25 kW	8.27 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	COP Tj = Tbiv	3.24	2.26
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.51 kW	8.04 kW
WTOL 60 °C 60 °C 50 W 50 W PTO 0 W 0 W PSB 25 W 25 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Electricity 1.86 kW 1.36 kW	COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.04
Poff 50 W 50 W PTO 0 W 0 W PSB 25 W 25 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.86 kW 1.36 kW	Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
PTO 0 W 0 W PSB 25 W 25 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.86 kW 1.36 kW	WTOL	60 °C	60 °C
PSB 25 W 25 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity 1.86 kW 1.36 kW	Poff	50 W	50 W
PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.86 kW 1.36 kW	РТО	o w	0 W
Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.86 kW 1.36 kW	PSB	25 W	25 W
Supplementary Heater: PSUP 1.86 kW 1.36 kW	PCK	0 W	0 W
	Supplementary Heater: Type of energy input	Electricity	Electricity
Annual energy consumption Qhe 4314 kWh 5689 kWh	Supplementary Heater: PSUP	1.86 kW	1.36 kW
	Annual energy consumption Qhe	4314 kWh	5689 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

CEN heat pump KEYMARK

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit		
Shutting off the heat transfer medium flow		
Complete power supply failure	passed	
Defrost test	passed	

EN 14511-2		
	Low temperature	Medium temperature
Heat output	7.01 kW	7.93 kW
El input	1.49 kW	2.73 kW
СОР	4.69	2.90

EN 14825	
Pdesignh	9.32 kW
Rated airflow rate	4500 m³/h



Model: Vitocal 200-S AWB-M-E-AC 201.D13

Configure model		
Model name	Vitocal 200-S AWB-M-E-AC 201.D13	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

	General Data	
Power supply	1x230V 50Hz	

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	7.85 kW	7.93 kW	
El input	1.66 kW	2.73 kW	
СОР	4.72	2.90	



EN 14825		
Pdesignh	9.99 kW	
Rated airflow rate	4500 m³/h	

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	39 dB(A)	39 dB(A)	
Sound power level outdoor 56 dB(A) 56 dB(A)			

EN 14825		
	Low temperature	Medium temperature
η_{s}	175 %	130 %
Prated	9.99 kW	10.07 kW
SCOP	4.46	3.32
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.83 kW	8.91 kW
COP Tj = -7°C	3.19	2.27
Pdh Tj = $+2$ °C	5.71 kW	5.90 kW
COP Tj = +2°C	4.30	3.17



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Pdh Tj = +7°C	8.86 kW	5.38 kW
$COP Tj = +7^{\circ}C$	5.63	4.24
Pdh Tj = 12°C	6.65 kW	6.42 kW
COP Tj = 12°C	7.64	5.72
Pdh Tj = Tbiv	8.83 kW	8.91 kW
COP Tj = Tbiv	3.19	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.06 kW	8.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	0 W	o w
PSB	25 W	25 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.98 kW	1.54 kW
Annual energy consumption Qhe	4625 kWh	6275 kWh



Model: Vitocal 200-S AWB-M-E-AC 201.D16

Configure model		
Model name Vitocal 200-S AWB-M-E-AC 201.D16		
Application Heating (medium temp)		
Units Indoor + Outdoor		
Climate Zone n/a		
Reversibility No		
Cooling mode application (optional) n/a		

General Data		
Power supply 1x230V 50Hz		

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	8.64 kW	8.42 kW		
El input	1.90 kW	2.89 kW		
СОР	4.54	2.92		



EN 14825		
Pdesignh	10.61 kW	
Rated airflow rate	4500 m³/h	

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	39 dB(A)	39 dB(A)	
Sound power level outdoor 56 dB(A) 56 dB(A)			

EN 14825		
	Low temperature	Medium temperature
η_{s}	175 %	130 %
Prated	10.61 kW	10.72 kW
SCOP	4.46	3.34
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7 °C	9.39 kW	9.49 kW
COP Tj = -7 °C	3.12	2.26
Pdh Tj = $+2$ °C	5.72 kW	5.91 kW
COP Tj = +2°C	4.29	3.19



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Pdh Tj = +7°C	8.88 kW	5.39 kW
COP Tj = +7°C	5.68	4.27
Pdh Tj = 12°C	6.67 kW	6.42 kW
COP Tj = 12°C	7.74	5.75
Pdh Tj = Tbiv	9.39 kW	9.49 kW
COP Tj = Tbiv	3.12	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.55 kW	9.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	59 W	59 W
РТО	o w	0 W
PSB	25 W	25 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.11 kW	1.57 kW
Annual energy consumption Qhe	4917 kWh	6638 kWh



Model: Vitocal 200-S AWB-M 201.D10

Configure model		
Model name	Vitocal 200-S AWB-M 201.D10	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	7.01 kW	7.93 kW
El input	1.49 kW	2.73 kW
СОР	4.69	2.90



EN 14825	
Pdesignh	9.32 kW
Rated airflow rate	4500 m³/h

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	176 %	129 %
Prated	9.32 kW	9.35 kW
SCOP	4.47	3.29
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.25 kW	8.27 kW
COP Tj = -7°C	3.24	2.26
Pdh Tj = +2°C	5.32 kW	6.07 kW
COP Tj = +2°C	4.32	3.15



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Pdh Tj = +7°C	6.60 kW	5.37 kW
COP Tj = +7°C	5.81	4.21
Pdh Tj = 12°C	6.63 kW	6.41 kW
COP Tj = 12°C	7.51	5.70
Pdh Tj = Tbiv	8.25 kW	8.27 kW
COP Tj = Tbiv	3.24	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.51 kW	8.04 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	0 W	o w
PSB	25 W	25 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.86 kW	1.36 kW
Annual energy consumption Qhe	4314 kWh	5867 kWh



Model: Vitocal 200-S AWB-M 201.D13

Configure model		
Model name	Vitocal 200-S AWB-M 201.D13	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	7.85 kW	7.93 kW		
El input	1.66 kW	2.73 kW		
СОР	4.72	2.90		



EN 14825		
Pdesignh	9.99 kW	
Rated airflow rate	4500 m³/h	

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	39 dB(A)	39 dB(A)	
Sound power level outdoor 56 dB(A) 56 dB(A)			

EN 14825		
	Low temperature	Medium temperature
η_{s}	175 %	130 %
Prated	9.99 kW	10.07 kW
SCOP	4.46	3.32
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.83 kW	8.91 kW
COP Tj = -7°C	3.19	2.27
Pdh Tj = $+2$ °C	5.71 kW	5.90 kW
COP Tj = +2°C	4.30	3.17



8.86 kW	5.38 kW
5.63	4.24
6.65 kW	6.42 kW
7.64	5.72
8.83 kW	8.91 kW
3.19	2.27
8.06 kW	8.59 kW
2.86	2.04
0.98	0.99
60 °C	60 °C
50 W	50 W
o w	0 W
25 W	25 W
0 W	0 W
Electricity	Electricity
1.98 kW	1.54 kW
4625 kWh	6275 kWh
	5.63 6.65 kW 7.64 8.83 kW 3.19 8.06 kW 2.86 0.98 60 °C 50 W 0 W 25 W 0 W Electricity 1.98 kW



Model: Vitocal 200-S AWB-M 201.D16

Configure model		
Model name Vitocal 200-S AWB-M 201.D16		
Application Heating (medium temp)		
Units Indoor + Outdoor		
Climate Zone n/a		
Reversibility No		
Cooling mode application (optional) n/a		

General Data		
Power supply	1x230V 50Hz	

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	8.64 kW	8.42 kW		
El input	1.90 kW	2.89 kW		
СОР	4.54	2.92		



EN 14825		
Pdesignh	10.61 kW	
Rated airflow rate	4500 m³/h	

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	39 dB(A)	39 dB(A)	
Sound power level outdoor 56 dB(A) 56 dB(A)			

EN 14825			
Low temperature		Medium temperature	
η_{s}	175 %	130 %	
Prated	10.61 kW	10.72 kW	
SCOP	4.46	3.34	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	9.39 kW	9.49 kW	
COP Tj = -7°C	3.12	2.26	
Pdh Tj = +2°C	5.72 kW	5.91 kW	
COP Tj = +2°C	4.29	3.19	



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Pdh Tj = +7°C	8.88 kW	5.39 kW
$COP Tj = +7^{\circ}C$	5.68	4.27
Pdh Tj = 12°C	6.67 kW	6.42 kW
COP Tj = 12°C	7.74	5.75
Pdh Tj = Tbiv	9.39 kW	9.49 kW
COP Tj = Tbiv	3.12	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.55 kW	9.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	59 W	59 W
РТО	o w	o w
PSB	25 W	25 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.11 kW	1.57 kW
Annual energy consumption Qhe	4917 kWh	6638 kWh



Model: Vitocal 200-S AWB-E-M 201.D10

Configure model		
Model name	Vitocal 200-S AWB-E-M 201.D10	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	7.01 kW	7.93 kW
El input	1.49 kW	2.73 kW
СОР	4.69	2.90



EN 14825	
Pdesignh	9.32 kW
Rated airflow rate	4500 m³/h

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	176 %	129 %
Prated	9.32 kW	9.35 kW
SCOP	4.47	3.29
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.25 kW	8.27 kW
COP Tj = -7°C	3.24	2.26
Pdh Tj = +2°C	5.32 kW	6.07 kW
COP Tj = +2°C	4.32	3.15



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	, -	
Pdh Tj = +7°C	6.60 kW	5.37 kW
$COP Tj = +7^{\circ}C$	5.81	4.21
Pdh Tj = 12°C	6.63 kW	6.41 kW
COP Tj = 12°C	7.51	5.70
Pdh Tj = Tbiv	8.25 kW	8.27 kW
COP Tj = Tbiv	3.24	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.51 kW	8.04 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	o w	o w
PSB	25 W	25 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.86 kW	1.36 kW
Annual energy consumption Qhe	4314 kWh	5867 kWh



Model: Vitocal 200-S AWB-E-M 201.D13

Configure model		
Model name	Vitocal 200-S AWB-E-M 201.D13	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	7.85 kW	7.93 kW	
El input	1.66 kW	2.73 kW	
СОР	4.72	2.90	



EN 14825	
Pdesignh	9.99 kW
Rated airflow rate	4500 m³/h

Average Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	39 dB(A)	39 dB(A)	
Sound power level outdoor	56 dB(A)	56 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{S}	175 %	130 %
Prated	9.99 kW	10.07 kW
SCOP	4.46	3.32
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7° C	8.83 kW	8.91 kW
COP Tj = -7 °C	3.19	2.27
Pdh Tj = $+2$ °C	5.71 kW	5.90 kW
$COPTj = +2^{\circ}C$	4.30	3.17



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Pdh Tj = +7°C	8.86 kW	5.38 kW
$COP Tj = +7^{\circ}C$	5.63	4.24
Pdh Tj = 12°C	6.65 kW	6.42 kW
COP Tj = 12°C	7.64	5.72
Pdh Tj = Tbiv	8.83 kW	8.91 kW
COP Tj = Tbiv	3.19	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.06 kW	8.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	o w	0 W
PSB	25 W	25 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.98 kW	1.54 kW
Annual energy consumption Qhe	4625 kWh	6275 kWh

Model: Vitocal 200-S AWB-E-M 201.D16

Configure model		
Model name Vitocal 200-S AWB-E-M 201.D16		
Application Heating (medium temp)		
Units	Indoor + Outdoor	
Climate Zone n/a		
Reversibility No		
Cooling mode application (optional) n/a		

General Data		
Power supply	1x230V 50Hz	

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	8.64 kW	8.42 kW	
El input	1.90 kW	2.89 kW	
СОР	4.54	2.92	



EN 14825		
Pdesignh	10.61 kW	
Rated airflow rate	4500 m³/h	

Average Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	39 dB(A)	39 dB(A)	
Sound power level outdoor 56 dB(A) 56 dB(A)			

EN 14825		
	Low temperature	Medium temperature
η_{s}	175 %	130 %
Prated	10.61 kW	10.72 kW
SCOP	4.46	3.34
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.39 kW	9.49 kW
COP $Tj = -7$ °C	3.12	2.26
Pdh Tj = +2°C	5.72 kW	5.91 kW
COP Tj = +2°C	4.29	3.19



Annual energy consumption Qhe

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This information was generated by the HP KEYMARK database on 18 Mar		
Pdh Tj = +7°C	8.88 kW	5.39 kW
$COP Tj = +7^{\circ}C$	5.68	4.27
Pdh Tj = 12°C	6.67 kW	6.42 kW
COP Tj = 12°C	7.74	5.75
Pdh Tj = Tbiv	9.39 kW	9.49 kW
COP Tj = Tbiv	3.12	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.55 kW	9.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	59 W	59 W
PTO	o w	0 W
PSB	25 W	25 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.11 kW	1.57 kW

4917 kWh

6638 kWh



Model: Vitocal 222-S AWBT-M 221.C10

Configure model	
Model name	Vitocal 222-S AWBT-M 221.C10
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data		
Power supply	1x230V 50Hz	

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure		
Defrost test	passed	

EN 14511-2		
	Low temperature	Medium temperature
Heat output	7.01 kW	7.93 kW
El input	1.49 kW	2.73 kW
СОР	4.69	2.90



EN 14825	
Pdesignh	9.32 kW
Rated airflow rate	4500 m³/h

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	176 %	129 %
Prated	9.32 kW	9.35 kW
SCOP	4.47	3.29
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.25 kW	8.27 kW
COP Tj = -7°C	3.24	2.26
Pdh Tj = +2°C	5.32 kW	6.07 kW
COP Tj = +2°C	4.32	3.15



	,	
Pdh Tj = +7°C	6.60 kW	5.37 kW
COP Tj = +7°C	5.81	4.21
Pdh Tj = 12°C	6.63 kW	6.41 kW
COP Tj = 12°C	7.51	5.70
Pdh Tj = Tbiv	8.25 kW	8.27 kW
COP Tj = Tbiv	3.24	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.51 kW	8.04 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	o w	o w
PSB	25 W	25 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.86 kW	1.36 kW
Annual energy consumption Qhe	4314 kWh	5867 kWh

Model: Vitocal 222-S AWBT-M 221.C13

Configure model	
Model name	Vitocal 222-S AWBT-M 221.C13
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data		
Power supply	1x230V 50Hz	

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	7.85 kW	7.93 kW	
El input	1.66 kW	2.73 kW	
СОР	4.72	2.90	



EN 14825		
Pdesignh	9.99 kW	
Rated airflow rate	4500 m³/h	

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	175 %	130 %
Prated	9.99 kW	10.07 kW
SCOP	4.46	3.32
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.83 kW	8.91 kW
COP Tj = -7°C	3.19	2.27
Pdh Tj = $+2$ °C	5.71 kW	5.90 kW
COP Tj = +2°C	4.30	3.17



8.86 kW	5.38 kW
5.63	4.24
6.65 kW	6.42 kW
7.64	5.72
8.83 kW	8.91 kW
3.19	2.27
8.06 kW	8.59 kW
2.86	2.04
0.98	0.99
60 °C	60 °C
50 W	50 W
o w	0 W
25 W	25 W
0 W	0 W
Electricity	Electricity
1.98 kW	1.54 kW
4625 kWh	6275 kWh
	5.63 6.65 kW 7.64 8.83 kW 3.19 8.06 kW 2.86 0.98 60 °C 50 W 0 W 25 W 0 W Electricity 1.98 kW

Model: Vitocal 222-S AWBT-M 221.C16

Configure model			
Model name Vitocal 222-S AWBT-M 221.C16			
Application	lication Heating (medium temp)		
Units Indoor + Outdoor			
Climate Zone n/a			
Reversibility No			
Cooling mode application (optional)	n/a		

General Data		
Power supply	1x230V 50Hz	

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	8.64 kW	8.42 kW
El input	1.90 kW	2.89 kW
СОР	4.54	2.92



EN 14825		
Pdesignh	10.61 kW	
Rated airflow rate	4500 m³/h	

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	175 %	130 %
Prated	10.61 kW	10.72 kW
SCOP	4.46	3.34
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.39 kW	9.49 kW
COP Tj = -7°C	3.12	2.26
Pdh Tj = +2°C	5.72 kW	5.91 kW
COP Tj = +2°C	4.29	3.19



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Pdh Tj = $+7^{\circ}$ C	8.88 kW	5.39 kW
COP Tj = +7°C	5.68	4.27
Pdh Tj = 12°C	6.67 kW	6.42 kW
COP Tj = 12°C	7.74	5.75
Pdh Tj = Tbiv	9.39 kW	9.49 kW
COP Tj = Tbiv	3.12	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.55 kW	9.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	59 W	59 W
РТО	o w	o w
PSB	25 W	25 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.11 kW	1.57 kW
Annual energy consumption Qhe	4917 kWh	6638 kWh



Model: Vitocal 222-S AWBT-M-E -AC 221.C10

Configure model		
Model name	Vitocal 222-S AWBT-M-E -AC 221.C10	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	7.01 kW	7.93 kW
El input	1.49 kW	2.73 kW
СОР	4.69	2.90



EN 14825	
Pdesignh	9.32 kW
Rated airflow rate	4500 m³/h

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	176 %	129 %
Prated	9.32 kW	9.35 kW
SCOP	4.47	3.29
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.25 kW	8.27 kW
COP Tj = -7° C	3.24	2.26
Pdh Tj = +2°C	5.32 kW	6.07 kW
COP Tj = +2°C	4.32	3.15



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Pdh Tj = $+7^{\circ}$ C	6.60 kW	5.37 kW
$COP Tj = +7^{\circ}C$	5.81	4.21
Pdh Tj = 12°C	6.63 kW	6.41 kW
COP Tj = 12°C	7.51	5.70
Pdh Tj = Tbiv	8.25 kW	8.27 kW
COP Tj = Tbiv	3.24	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.51 kW	8.04 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	o w	0 W
PSB	25 W	25 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.86 kW	1.36 kW
Annual energy consumption Qhe	4314 kWh	5867 kWh



Model: Vitocal 222-S AWBT-M-E-AC 221.C13

Configure model		
Model name	Vitocal 222-S AWBT-M-E-AC 221.C13	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	7.85 kW	7.93 kW		
El input	1.66 kW	2.73 kW		
СОР	4.72	2.90		



EN 14825		
Pdesignh	9.99 kW	
Rated airflow rate	4500 m³/h	

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	39 dB(A)	39 dB(A)	
Sound power level outdoor 56 dB(A) 56 dB(A)			

EN 14825		
	Low temperature	Medium temperature
η_{s}	175 %	130 %
Prated	9.99 kW	10.07 kW
SCOP	4.46	3.32
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7° C	8.83 kW	8.91 kW
$COP Tj = -7^{\circ}C$	3.19	2.27
Pdh Tj = $+2$ °C	5.71 kW	5.90 kW
$COPTj = +2^{\circ}C$	4.30	3.17



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Pdh Tj = +7°C	8.86 kW	5.38 kW
$COP Tj = +7^{\circ}C$	5.63	4.24
Pdh Tj = 12°C	6.65 kW	6.42 kW
COP Tj = 12°C	7.64	5.72
Pdh Tj = Tbiv	8.83 kW	8.91 kW
COP Tj = Tbiv	3.19	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.06 kW	8.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	o w	0 W
PSB	25 W	25 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.98 kW	1.54 kW
Annual energy consumption Qhe	4625 kWh	6275 kWh



Model: Vitocal 222-S AWBT-M-E-AC 221.C16

Configure model		
Model name Vitocal 222-S AWBT-M-E-AC 221.C16		
Application	Heating (medium temp)	
Units Indoor + Outdoor		
Climate Zone n/a		
Reversibility No		
Cooling mode application (optional) n/a		

General Data		
Power supply	1x230V 50Hz	

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	8.64 kW	8.42 kW		
El input	1.90 kW	2.89 kW		
СОР	4.54	2.92		



EN 14825		
Pdesignh	10.61 kW	
Rated airflow rate	4500 m³/h	

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	39 dB(A)	39 dB(A)	
Sound power level outdoor 56 dB(A) 56 dB(A)			

EN 14825		
	Low temperature	Medium temperature
η_{S}	175 %	130 %
Prated	10.61 kW	10.72 kW
SCOP	4.46	3.34
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7 °C	9.39 kW	9.49 kW
COP Tj = -7°C	3.12	2.26
Pdh Tj = $+2$ °C	5.72 kW	5.91 kW
$COPTj = +2^{\circ}C$	4.29	3.19



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Pdh Tj = $+7^{\circ}$ C	8.88 kW	5.39 kW
COP Tj = +7°C	5.68	4.27
Pdh Tj = 12°C	6.67 kW	6.42 kW
COP Tj = 12°C	7.74	5.75
Pdh Tj = Tbiv	9.39 kW	9.49 kW
COP Tj = Tbiv	3.12	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.55 kW	9.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	59 W	59 W
РТО	o w	0 W
PSB	25 W	25 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.11 kW	1.40 kW
Annual energy consumption Qhe	4917 kWh	6638 kWh



Model: Vitocal 222-S AWBT-M-E 221.C10

Configure model	
Model name	Vitocal 222-S AWBT-M-E 221.C10
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data		
Power supply	1x230V 50Hz	

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	7.01 kW	7.93 kW
El input	1.49 kW	2.73 kW
СОР	4.69	2.90



EN 14825	
Pdesignh	9.32 kW
Rated airflow rate	4500 m³/h

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	176 %	129 %
Prated	9.32 kW	9.35 kW
SCOP	4.47	3.29
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7° C	8.25 kW	8.27 kW
COP Tj = -7 °C	3.24	2.26
Pdh Tj = $+2$ °C	5.32 kW	6.07 kW
$COPTj = +2^{\circ}C$	4.32	3.15



Pdh Tj = $+7$ °C	6.60 kW	5.37 kW
$COP Tj = +7^{\circ}C$	5.81	4.21
Pdh Tj = 12°C	6.63 kW	6.41 kW
COP Tj = 12°C	7.51	5.70
Pdh Tj = Tbiv	8.25 kW	8.27 kW
COP Tj = Tbiv	3.24	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.51 kW	8.04 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	o w	o w
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.86 kW	1.36 kW
Annual energy consumption Qhe	4314 kWh	5867 kWh

Model: Vitocal 222-S AWBT-M-E 221.C13

Configure model		
Model name	Vitocal 222-S AWBT-M-E 221.C13	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	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	7.85 kW	7.93 kW	
El input	1.66 kW	2.73 kW	
СОР	4.72	2.90	



EN 14825		
Pdesignh	9.99 kW	
Rated airflow rate	4500 m³/h	

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor 56 dB(A) 56 dB(A)		

EN 14825			
Low temperature		Medium temperature	
η_{s}	175 %	130 %	
Prated	9.99 kW	10.07 kW	
SCOP	4.46	3.32	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.83 kW	8.91 kW	
COP Tj = -7°C	3.19	2.27	
Pdh Tj = $+2$ °C	5.71 kW	5.90 kW	
COP Tj = +2°C	4.30	3.17	



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Pdh Tj = $+7^{\circ}$ C	8.86 kW	5.38 kW
$COP Tj = +7^{\circ}C$	5.63	4.24
Pdh Tj = 12°C	6.65 kW	6.42 kW
COP Tj = 12°C	7.64	5.72
Pdh Tj = Tbiv	8.83 kW	8.91 kW
COP Tj = Tbiv	3.19	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.06 kW	8.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	50 W	50 W
РТО	o w	0 W
PSB	25 W	25 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.98 kW	1.54 kW
Annual energy consumption Qhe	4625 kWh	6275 kWh



Model: Vitocal 222-S AWBT-M-E 221.C16

Configure model		
Model name Vitocal 222-S AWBT-M-E 221.C16		
Application Heating (medium temp)		
Units Indoor + Outdoor		
Climate Zone n/a		
Reversibility No		
Cooling mode application (optional) n/a		

General Data		
Power supply	1x230V 50Hz	

EN 14511-2			
Low temperature Medium temperature			
Heat output	8.64 kW	8.42 kW	
El input	1.90 kW	2.89 kW	
СОР	4.54	2.92	

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	



EN 14825		
Pdesignh	10.61 kW	
Rated airflow rate	4500 m³/h	

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor 56 dB(A) 56 dB(A)		

EN 14825			
Low temperature		Medium temperature	
η_{s}	175 %	130 %	
Prated	10.61 kW	10.72 kW	
SCOP	4.46	3.34	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	9.39 kW	9.49 kW	
COP Tj = -7°C	3.12	2.26	
Pdh Tj = +2°C	5.72 kW	5.91 kW	
COP Tj = +2°C	4.29	3.19	



	,	
Pdh Tj = +7°C	8.88 kW	5.39 kW
$COP Tj = +7^{\circ}C$	5.68	4.27
Pdh Tj = 12°C	6.67 kW	6.42 kW
COP Tj = 12°C	7.74	5.75
Pdh Tj = Tbiv	9.39 kW	9.49 kW
COP Tj = Tbiv	3.12	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.55 kW	9.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	59 W	59 W
РТО	o w	o w
PSB	25 W	25 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.11 kW	1.57 kW
Annual energy consumption Qhe	4917 kWh	6638 kWh