

Page 1 of 37

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

#### **Login**

Summary of	Vitocal 2xx-S ODU1	Reg. No.	011-1W0199	
Certificate Holder				
Name	Viessmann Wärmepumpen G	Viessmann Wärmepumpen GmbH		
Address	Viessmannstr. 1	Zip	35107	
City	Allendorf/Eder	Country	Germany	
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH			
Subtype title	Vitocal 2xx-S ODU1			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R410A			
Mass of Refrigerant	1.8 kg			
Certification Date	15.03.2018	15.03.2018		
Testing basis	HP KEYMARK certification scheme rules rev. 7			



## Model: Vitocal 200-S AWB-M-E-AC 201.D04

Configure model		
Model name	Vitocal 200-S AWB-M-E-AC 201.D04	
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**

EN 14825			
		Low temperature	Medium temperature
Pdesignh	5.38 kW		
$\eta_{s}$	173 %	124 %	
Prated	5.38 kW	5.23 kW	
SCOP	4.4	3.18	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	4.76 kW	4.63 kW	
COP Tj = -7°C	2.86	2.03	
Pdh Tj = $+2$ °C	3.00 kW	3.11 kW	
$COP Tj = +2^{\circ}C$	4.33	3.07	
Pdh Tj = $+7^{\circ}$ C	3.15 kW	2.97 kW	



$COP Tj = +7^{\circ}C$	5.77	4.19
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.14	5.50
Pdh Tj = Tbiv	4.76 kW	4.63 kW
COP Tj = Tbiv	2.86	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.33 kW	4.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	0 W	o w
PSB	16 W	16 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	0.86 kW
Annual energy consumption Qhe	2524 kWh	3292 kWh



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

## Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.96 kW	3.61 kW
El input	0.87 kW	1.37 kW
СОР	4.56	2.64



## Model: Vitocal 200-S AWB-M-E-AC 201.D06

Configure model		
Model name	Vitocal 200-S AWB-M-E-AC 201.D06	
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	

### Heating

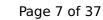
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.75 kW	4.1 kW
El input	1.03 kW	1.51 kW
СОР	4.6	2.72



EN 12102-1				
	Low temperature	Medium temperature		
Sound power level indoor	39 dB(A)	39 dB(A)		
Sound power level outdoor	54 dB(A)	54 dB(A)		

EN 14825			
		Low temperature	Medium temperature
Pdesignh	5.59 kW		
$\eta_{s}$	172 %	125 %	
Prated	5.59 kW	5.59 kW	
SCOP	4.38	3.21	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	4.95 kW	4.95 kW	
COP Tj = -7°C	2.83	2.03	
Pdh Tj = +2°C	3.00 kW	3.30 kW	
$COP Tj = +2^{\circ}C$	4.33	3.11	
Pdh Tj = $+7$ °C	3.15 kW	2.97 kW	
$COP Tj = +7^{\circ}C$	5.81	4.22	
Pdh Tj = 12°C	3.05 kW	2.91 kW	
COP Tj = 12°C	7.20	5.51	





Pdh Tj = Tbiv	4.95 kW	4.95 kW
COP Tj = Tbiv	2.83	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.49 kW	4.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.13 kW	0.94 kW
	2637 kWh	3605 kWh



## Model: Vitocal 200-S AWB-M 201.D04

Configure model		
Model name	Vitocal 200-S AWB-M 201.D04	
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	

### Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.96 kW	3.61 kW
El input	0.87 kW	1.37 kW
СОР	4.56	2.64



EN 12102-1				
	Low temperature	Medium temperature		
Sound power level indoor	39 dB(A)	39 dB(A)		
Sound power level outdoor	53 dB(A)	53 dB(A)		

EN 14825			
		Low temperature	Medium temperature
Pdesignh	5.38 kW		
$\eta_{s}$	173 %	124 %	
Prated	5.38 kW	5.23 kW	
SCOP	4.4	3.18	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	4.76 kW	4.63 kW	
COP Tj = -7°C	2.86	2.03	
Pdh Tj = +2°C	3.00 kW	3.11 kW	
$COP Tj = +2^{\circ}C$	4.33	3.07	
Pdh Tj = $+7$ °C	3.15 kW	2.97 kW	
$COP Tj = +7^{\circ}C$	5.77	4.19	
Pdh Tj = 12°C	3.05 kW	2.91 kW	
COP Tj = 12°C	7.14	5.50	



Page 10 of 37

		-
Pdh Tj = Tbiv	4.76 kW	4.63 kW
COP Tj = Tbiv	2.86	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.33 kW	4.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	o w	o w
PSB	16 W	16 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	0.86 kW
Annual energy consumption Qhe	2524 kWh	3292 kWh



## Model: Vitocal 200-S AWB-M 201.D06

Configure model		
Model name	Vitocal 200-S AWB-M 201.D06	
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	

### Heating

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

	EN 14511-2	
	Low temperature	Medium temperature
Heat output	4.75 kW	4.1 kW
El input	1.03 kW	1.51 kW
СОР	4.6	2.72



	EN 12102-1	
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825			
		Low temperature	Medium temperature
Pdesignh	5.59 kW		
$\eta_{s}$	172 %	125 %	
Prated	5.59 kW	5.59 kW	
SCOP	4.38	3.21	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	4.95 kW	4.95 kW	
COP Tj = -7°C	2.83	2.03	
Pdh Tj = +2°C	3.00 kW	3.30 kW	
$COP Tj = +2^{\circ}C$	4.33	3.11	
Pdh Tj = $+7$ °C	3.15 kW	2.97 kW	
$COP Tj = +7^{\circ}C$	5.81	4.22	
Pdh Tj = 12°C	3.05 kW	2.91 kW	
COP Tj = 12°C	7.20	5.51	



		•
Pdh Tj = Tbiv	4.95 kW	4.95 kW
COP Tj = Tbiv	2.83	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.49 kW	4.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	o w	o w
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.13 kW	0.94 kW
Annual energy consumption Qhe	2637 kWh	3605 kWh



## Model: Vitocal 200-S AWB-E-M 201.D04

Cor	nfigure model
Model name	Vitocal 200-S AWB-E-M 201.D04
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	

### Heating

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

	EN 14511-2	
	Low temperature	Medium temperature
Heat output	3.96 kW	3.61 kW
El input	0.87 kW	1.37 kW
СОР	4.56	2.64



	EN 12102-1	
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

	EN 14825		
		Low temperature	Medium temperature
Pdesignh	5.38 kW		
$\eta_{s}$	173 %	124 %	
Prated	5.38 kW	5.23 kW	
SCOP	4.4	3.18	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	4.76 kW	4.63 kW	
COP Tj = -7°C	2.86	2.03	
Pdh Tj = +2°C	3.00 kW	3.11 kW	
$COP Tj = +2^{\circ}C$	4.33	3.07	
Pdh Tj = $+7$ °C	3.15 kW	2.97 kW	
$COP Tj = +7^{\circ}C$	5.77	4.19	
Pdh Tj = 12°C	3.05 kW	2.91 kW	
COP Tj = 12°C	7.14	5.50	



### Page 16 of 37

Pdh Tj = Tbiv	4.76 kW	4.63 kW
COP Tj = Tbiv	2.86	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.33 kW	4.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	0.86 kW
Annual energy consumption Qhe	2524 kWh	3292 kWh



## Model: Vitocal 200-S AWB-E-M 201.D06

Configure model		
Model name Vitocal 200-S AWB-E-M 201.D06		
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**

EN 14825			
		Low temperature	Medium temperature
Pdesignh	5.59 kW		
$\eta_{s}$	172 %	125 %	
Prated	5.59 kW	5.59 kW	
SCOP	4.38	3.21	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	4.95 kW	4.95 kW	
COP Tj = -7°C	2.83	2.03	
Pdh Tj = +2°C	3.00 kW	3.30 kW	
COP Tj = +2°C	4.33	3.11	
Pdh Tj = $+7$ °C	3.15 kW	2.97 kW	



$COP Tj = +7^{\circ}C$	5.81	4.22
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.20	5.51
Pdh Tj = Tbiv	4.95 kW	4.95 kW
COP Tj = Tbiv	2.83	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.49 kW	4.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	0 W	0 W
PSB	16 W	16 W
РСК	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.13 kW	0.94 kW
Annual energy consumption Qhe	2637 kWh	3447 kWh



 $$\operatorname{\textit{Page}}\ 19$ of 37$$  This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

## Heating

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

EN 14511-2			
Low temperature Medium temperature			
Heat output	4.75 kW	4.1 kW	
El input	1.03 kW	1.51 kW	
СОР	4.6	2.72	



## Model: Vitocal 222-S AWBT-M 221.C04

Configure model		
Model name Vitocal 222-S AWBT-M 221.C04		
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		

### Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	3.96 kW	3.61 kW	
El input	0.87 kW	1.37 kW	
СОР	4.56	2.64	

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



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	39 dB(A)	39 dB(A)	
Sound power level outdoor	53 dB(A)	53 dB(A)	

EN 14825			
		Low temperature	Medium temperature
Pdesignh	5.21 kW		
$\eta_{s}$	176 %	126 %	
Prated	5.21 kW	5.4 kW	
SCOP	4.49	3.22	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	4.61 kW	4.78 kW	
COP Tj = -7°C	2.87	2.02	
Pdh Tj = +2°C	3.42 kW	3.17 kW	
COP Tj = +2°C	4.50	3.16	
Pdh Tj = +7°C	3.17 kW	2.97 kW	
$COP Tj = +7^{\circ}C$	5.76	4.18	
Pdh Tj = 12°C	2.95 kW	2.80 kW	
COP Tj = 12°C	6.95	5.35	



Page 22 of 37

		-
Pdh Tj = Tbiv	4.61 kW	4.78 kW
COP Tj = Tbiv	2.87	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.12 kW	2.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.02
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	o w	o w
PSB	16 W	16 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	0.86 kW
Annual energy consumption Qhe	2524 kWh	3292 kWh



## Model: Vitocal 222-S AWBT-M 221.C06

Configure model		
Model name	Vitocal 222-S AWBT-M 221.C06	
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	

### Heating

EN 14511-2		
Low temperature Medium temperature		
Heat output	4.75 kW	4.1 kW
El input	1.03 kW	1.51 kW
СОР	4.6	2.72

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





EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	39 dB(A)	39 dB(A)	
Sound power level outdoor	54 dB(A)	54 dB(A)	

EN 14825			
		Low temperature	Medium temperature
Pdesignh	5.59 kW		-
$\eta_{s}$	172 %	125 %	
Prated	5.59 kW	5.59 kW	-
SCOP	4.38	3.21	-
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	-
Pdh Tj = -7°C	4.95 kW	4.95 kW	-
COP Tj = -7°C	2.83	2.03	
Pdh Tj = +2°C	3.00 kW	3.30 kW	
COP Tj = +2°C	4.33	3.11	
Pdh Tj = $+7^{\circ}$ C	3.15 kW	2.97 kW	
$COPTj = +7^{\circ}C$	5.81	4.22	
Pdh Tj = 12°C	3.05 kW	2.91 kW	
COP Tj = 12°C	7.20	5.51	



Page 25 of 37

		-
Pdh Tj = Tbiv	4.95 kW	4.95 kW
COP Tj = Tbiv	2.83	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.49 kW	4.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	o w	o w
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.13 kW	0.94 kW
Annual energy consumption Qhe	2569 kWh	3447 kWh



## Model: Vitocal 222-S AWBT-M-E-AC 221.C04

Configure model		
Model name	Vitocal 222-S AWBT-M-E-AC 221.C04	
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	

### Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	3.96 kW	3.61 kW	
El input	0.87 kW	1.37 kW	
СОР	4.56	2.64	

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825			
		Low temperature	Medium temperature
Pdesignh	5.38 kW		
$\eta_{s}$	173 %	124 %	
Prated	5.38 kW	5.23 kW	
SCOP	4.4	3.18	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	4.76 kW	4.63 kW	
COP Tj = -7°C	2.86	2.03	
Pdh Tj = +2°C	3.00 kW	3.11 kW	
COP Tj = +2°C	4.33	3.07	
Pdh Tj = +7°C	3.15 kW	2.97 kW	
COP Tj = +7°C	5.77	4.19	
Pdh Tj = 12°C	3.05 kW	2.91 kW	
COP Tj = 12°C	7.14	5.50	



Page 28 of 37

		-
Pdh Tj = Tbiv	4.76 kW	4.63 kW
COP Tj = Tbiv	2.86	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.33 kW	4.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	o w	o w
PSB	16 W	16 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	0.86 kW
Annual energy consumption Qhe	2524 kWh	3292 kWh



## Model: Vitocal 222-S AWBT-M-E-AC 221.C06

Configure model		
Model name	Vitocal 222-S AWBT-M-E-AC 221.C06	
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	

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.75 kW	4.1 kW
El input	1.03 kW	1.51 kW
СОР	4.6	2.72

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825			
		Low temperature	Medium temperature
Pdesignh	5.59 kW		
$\eta_{s}$	172 %	125 %	
Prated	5.59 kW	5.59 kW	
SCOP	4.38	3.21	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	4.95 kW	4.95 kW	
COP Tj = -7°C	2.83	2.03	
Pdh Tj = +2°C	3.00 kW	3.30 kW	
$COP Tj = +2^{\circ}C$	4.33	3.11	
Pdh Tj = $+7$ °C	3.15 kW	2.97 kW	
$COP Tj = +7^{\circ}C$	5.81	4.22	
Pdh Tj = 12°C	3.05 kW	2.91 kW	
COP Tj = 12°C	7.20	5.51	



Pdh Tj = Tbiv	4.95 kW	4.95 kW
COP Tj = Tbiv	2.83	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.49 kW	4.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	o w	o w
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.13 kW	0.94 kW
Annual energy consumption Qhe	2637 kWh	3605 kWh



## Model: Vitocal 222-S AWBT-M-E 221.C04

Configure model		
Model name	Vitocal 222-S AWBT-M-E 221.C04	
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	

### Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	3.96 kW	3.61 kW	
El input	0.87 kW	1.37 kW	
СОР	4.56	2.64	

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825			
	Low temperature	Medium temperature	
5.38 kW		-	
173 %	124 %		
5.38 kW	5.23 kW		
4.4	3.18		
-7 °C	-7 °C		
-10 °C	-10 °C		
4.76 kW	4.63 kW		
2.86	2.03		
3.00 kW	3.11 kW		
4.33	3.07		
3.15 kW	2.97 kW		
5.77	4.19		
3.05 kW	2.91 kW		
7.14	5.50		
	5.38 kW 173 % 5.38 kW 4.4 -7 °C -10 °C 4.76 kW 2.86 3.00 kW 4.33 3.15 kW 5.77 3.05 kW	Low temperature  5.38 kW  173 %  124 %  5.38 kW  5.23 kW  4.4  3.18  -7 °C  -10 °C  -10 °C  4.76 kW  4.63 kW  2.86  2.03  3.00 kW  3.11 kW  4.33  3.07  3.15 kW  2.97 kW  5.77  4.19  3.05 kW  2.91 kW	



Pdh Tj = Tbiv	4.76 kW	4.63 kW
COP Tj = Tbiv	2.86	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.33 kW	4.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	o w	0 W
PSB	16 W	16 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	0.86 kW
Annual energy consumption Qhe	2524 kWh	3292 kWh



## Model: Vitocal 222-S AWBT-M-E 221.C06

Configure model		
Model name Vitocal 222-S AWBT-M-E 221.C06		
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	

### Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	4.75 kW	4.1 kW		
El input	1.03 kW	1.51 kW		
COP 4.6 2.72				

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



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	39 dB(A)	39 dB(A)	
Sound power level outdoor	54 dB(A)	54 dB(A)	

EN 14825			
		Low temperature	Medium temperature
Pdesignh	5.59 kW		
$\eta_{s}$	172 %	125 %	
Prated	5.59 kW	5.59 kW	
SCOP	4.38	3.21	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	4.95 kW	4.95 kW	
COP Tj = -7°C	2.83	2.03	
Pdh Tj = +2°C	3.00 kW	3.30 kW	
$COP Tj = +2^{\circ}C$	4.33	3.11	
Pdh Tj = $+7$ °C	3.15 kW	2.97 kW	
$COP Tj = +7^{\circ}C$	5.81	4.22	
Pdh Tj = 12°C	3.05 kW	2.91 kW	
COP Tj = 12°C	7.20	5.51	



**PCK** 

Supplementary Heater: Type of energy input

Supplementary Heater: PSUP

Annual energy consumption Qhe

Page 37 of 37 This information was generated by the HP KEYMARK database on 18 Mar 2022

#### Pdh Tj = Tbiv4.95 kW 4.95 kW COP Tj = Tbiv2.83 2.03 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < 4.49 kW 4.68 kW Tdesignh COP Tj = TOL or COP Tj = Tdesignh if TOL < 2.56 1.85 **Tdesignh** 0.98 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < 0.99 Tdesignh WTOL 60°C 60 °C Poff 11 W 11 W PTO 0 W 0 W **PSB** 16 W 16 W

0 W

Electricity

1.13 kW

2637

kWh

0 W

Electricity

0.94 kW

3605 kWh