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

Login

Summary of	Vitocal 2xx-G B08	Reg. No.	011-1W0286		
Certificate Holder	Certificate Holder				
Name	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-G B08				
Heat Pump Type	Brine/Water				
Refrigerant	R410A				
Mass of Refrigerant	1.95 kg				
Certification Date	11.07.2019				



Model: VITOCAL 200-G BWC 201.B08

Configure model			
Model name	VITOCAL 200-G BWC 201.B08		
Application	Heating (medium temp)		
Units	Indoor		
Climate Zone	Colder Climate + Warmer Climate		
Reversibility	No		
Cooling mode application (optional)	n/a		

	General Data	
Power supply	3x400V 50Hz	

Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	7.54 kW	6.95 kW		
El input	1.62 kW	2.51 kW		
СОР	4.64	2.74		

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

Average Climate



EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	43 dB(A)	43 dB(A)	

EN 14825				
		Low tempe	rature	Medium temperature
Pdesignh	7.57	kW		,
η_{s}	201	% 143 %		
Prated	8.60	kW 7.95 kV	V	
SCOP	5.23	3.79		
Tbiv	-7 °0	-7 °C		
TOL	-10	°C -10 °C		
Pdh Tj = -7°C	7.57	kW 6.99 kV	V	
COP Tj = -7°C	4.93	3.16		
Cdh Tj = -7 °C	0.99	0.99		
Pdh Tj = +2°C	7.63	kW 7.19 kV	V	
COP Tj = +2°C	5.23	3.77		
Cdh Tj = +2 °C	0.99	0.99		
Pdh Tj = +7°C	7.69	kW 7.31 kV	V	
COP Tj = +7°C	5.56	4.23		
Cdh Tj = +7 °C	0.99	0.99		





Pdh Tj = 12°C	7.76 kW	7.45 kW
COP Tj = 12°C	5.91	4.80
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.57 kW	6.99 kW
COP Tj = Tbiv	4.93	3.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.88	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
WTOL	65 °C	65 °C
Poff	o w	0 W
РТО	o w	o w
PSB	12 W	12 W
РСК	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.03 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	3398 kWh	4338 kWh

Warmer Climate



EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	43 dB(A)	43 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
η_{s}	205 %	143 %	
Prated	7.61 kW	6.92 kW	
SCOP	5.32	3.76	
Tbiv	2 °C	2 °C	
TOL	2 °C	2 °C	
Pdh Tj = +2°C	7.55 kW	6.92 kW	
COP Tj = +2°C	4.85	2.99	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	7.61 kW	7.09 kW	
$COP Tj = +7^{\circ}C$	5.15	3.45	
Cdh Tj = +7 °C	0.99	0.99	
Pdh Tj = 12°C	7.73 kW	7.34 kW	
COP Tj = 12°C	5.69	4.34	
Cdh Tj = +12 °C	0.99	0.99	
Pdh Tj = Tbiv	7.55 kW	6.92 kW	





COP Tj = Tbiv	4.85	2.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.85	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
WTOL	65 °C	65 °C
Poff	o w	0 W
РТО	o w	0 W
PSB	12 W	12 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	1897 kWh	2449 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{S}	195 %	142 %





This information was generated by the HF KLTMAKK database on 16 Mai 2022				
Prated	12.50 kW	11.63 kW		
SCOP	5.08	3.80		
Tbiv	-7 °C	-7 °C		
TOL	-22 °C	-22 °C		
Pdh Tj = -7° C	7.65 kW	7.21 kW		
$COP Tj = -7^{\circ}C$	5.56	3.80		
Cdh Tj = -7 °C	0.99	0.99		
Pdh Tj = $+2$ °C	7.70 kW	7.36 kW		
COP Tj = +2°C	5.90	4.33		
Cdh Tj = +2 °C	0.99	0.99		
Pdh Tj = $+7^{\circ}$ C	7.76 kW	7.76 kW		
$COPTj = +7^{\circ}C$	6.16	4.86		
Cdh Tj = $+7$ °C	0.99	0.99		
Pdh Tj = 12°C	7.77 kW	7.58 kW		
COP Tj = 12°C	6.24	5.25		
Cdh Tj = +12 °C	0.99	0.99		
Pdh Tj = Tbiv	7.65 kW	7.21 kW		
COP Tj = Tbiv	5.56	3.80		
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	6.96 kW		
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.11	3.09		
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00		



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

	<u> </u>	
WTOL	65 °C	65 °C
Poff	o w	0 W
РТО	0 W	0 W
PSB	12 W	12 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.93 kW	4.67 kW
Annual energy consumption Qhe	6143 kWh	7633 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.62	7.10
COP Tj = -15°C (if TOL $<$ -20°C)	5.11	3.46
Cdh Tj = -15 °C	0.99	0.99



Model: VITOCAL 200-G BWC 201.B08 SC

Configure model		
Model name VITOCAL 200-G BWC 201.B08 SC		
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data	
Power supply	n/a

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	7.54 kW	6.95 kW
El input	1.62 kW	2.51 kW
СОР	4.64	2.74

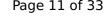
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825			
		Low temperature	Medium temperature
Pdesignh	7.57 kW		,
η_{s}	201 %	143 %	
Prated	8.60 kW	7.95 kW	
SCOP	5.23	3.79	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	7.57 kW	6.99 kW	
COP Tj = -7°C	4.93	3.16	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	7.63 kW	7.19 kW	
COP Tj = +2°C	5.23	3.77	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	7.69 kW	7.31 kW	
COP Tj = +7°C	5.56	4.23	
Cdh Tj = +7 °C	0.99	0.99	





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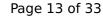
Pdh Tj = 12°C	7.76 kW	7.45 kW
COP Tj = 12°C	5.91	4.80
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.57 kW	6.99 kW
COP Tj = Tbiv	4.93	3.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.88	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
WTOL	65 °C	65 °C
Poff	o w	0 W
РТО	o w	o w
PSB	12 W	12 W
РСК	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.03 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	3398 kWh	4338 kWh

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	205 %	143 %
Prated	7.61 kW	6.92 kW
SCOP	5.32	3.76
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.55 kW	6.92 kW
COP Tj = +2°C	4.85	2.99
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	7.61 kW	7.09 kW
$COP Tj = +7^{\circ}C$	5.15	3.45
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.73 kW	7.34 kW
COP Tj = 12°C	5.69	4.34
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.55 kW	6.92 kW





COP Tj = Tbiv	4.85	2.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.85	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
WTOL	65 °C	65 °C
Poff	o w	o w
РТО	0 W	0 W
PSB	12 W	12 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	1897 kWh	2449 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{S}	195 %	142 %





This information was genera	ited by the HEREIMAI	IN database on 10 Mai 2022
Prated	12.50 kW	11.63 kW
SCOP	5.08	3.80
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.65 kW	7.21 kW
$COP Tj = -7^{\circ}C$	5.56	3.80
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	7.70 kW	7.36 kW
COP Tj = +2°C	5.90	4.33
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	7.76 kW	7.76 kW
$COP Tj = +7^{\circ}C$	6.16	4.86
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.77 kW	7.58 kW
COP Tj = 12°C	6.24	5.25
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.65 kW	7.21 kW
COP Tj = Tbiv	5.56	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	6.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.11	3.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
	•	



65 °C WTOL 65 °C 0 W Poff 0 W PTO 0 W 0 W **PSB** 12 W 12 W **PCK** 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 4.93 kW 4.67 kW Annual energy consumption Qhe 6095 kWh 7633 kWh Pdh Tj = -15°C (if TOL<-20°C) 7.62 7.10 COP Tj = -15°C (if TOL<-20°C) 5.11 3.46 Cdh Tj = -15 $^{\circ}$ C 0.99 0.99



Model: VITOCAL 222-G BWT 221.B08

Configure model		
Model name	VITOCAL 222-G BWT 221.B08	
Application	Heating + DHW + low temp	
Units	Indoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	
Off-peak product	Yes	

Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	7.54 kW	6.95 kW		
El input	1.62 kW	2.51 kW		
СОР	4.64	2.74		

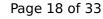
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

Average Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	

EN 14825				
		Low tempe	rature	Medium temperature
Pdesignh	7.57	kW		,
η_{s}	201	% 143 %		
Prated	8.60	kW 7.95 kV	V	
SCOP	5.23	3.79		
Tbiv	-7 °0	-7 °C		
TOL	-10	°C -10 °C		
Pdh Tj = -7°C	7.57	kW 6.99 kV	V	
COP Tj = -7°C	4.93	3.16		
Cdh Tj = -7 °C	0.99	0.99		
Pdh Tj = +2°C	7.63	kW 7.19 kV	V	
COP Tj = +2°C	5.23	3.77		
Cdh Tj = +2 °C	0.99	0.99		
Pdh Tj = +7°C	7.69	kW 7.31 kV	V	
COP Tj = +7°C	5.56	4.23		
Cdh Tj = +7 °C	0.99	0.99		





Pdh Tj = 12°C 7.76 kW 7.45 kW COP Tj = 12°C 5.91 4.80 Cdh Tj = +12 °C 0.99 0.99 Pdh Tj = Tbiv 7.57 kW 6.99 kW COP Tj = Tbiv 4.93 3.16 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < 7.55 kW 6.92 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < 4.88 2.99 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < 0.99 1.00 WTOL 65 °C 65 °C Poff 0 W 0 W PTO 0 W 0 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.05 kW 1.03 kW Backup Heater 0.00 kW Annual energy consumption Qhe 3398 kWh			,
Cdh Tj = +12 °C 0.99 0.99 Pdh Tj = Tbiv 7.57 kW 6.99 kW COP Tj = Tbiv 4.93 3.16 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL 7.55 kW 6.92 kW COP Tj = TOL or COP Tj = Tdesignh if TOL 4.88 2.99 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL 0.99 1.00 WTOL 65 °C 65 °C Poff 0 W 0 W PTO 0 W 0 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.05 kW 1.03 kW Backup Heater 0.00 kW Annual energy consumption Qhe 3398 4338 kWh	Pdh Tj = 12°C	7.76 kW	7.45 kW
Pdh Tj = Tbiv 7.57 kW 6.99 kW COP Tj = Tbiv 4.93 3.16 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL 7.55 kW 6.92 kW COP Tj = TOL or COP Tj = Tdesignh if TOL 4.88 2.99 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL 0.99 1.00 WTOL 65 °C 65 °C Poff 0 W 0 W PTO 0 W 0 W PSB 12 W 12 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.05 kW 1.03 kW Backup Heater 0.00 kW Annual energy consumption Qhe 3398 4338 kWh	COP Tj = 12°C	5.91	4.80
COP Tj = Tbiv 4.93 3.16 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL 7.55 kW 6.92 kW COP Tj = TOL or COP Tj = Tdesignh if TOL 4.88 2.99 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL 0.99 1.00 WTOL 65 °C 65 °C Poff 0 W 0 W PTO 0 W 0 W PSB 12 W 12 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.05 kW 1.03 kW Backup Heater 0.00 kW Annual energy consumption Qhe 3398 4338 kWh	Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL 7.55 kW 6.92 kW COP Tj = TOL or COP Tj = Tdesignh if TOL 4.88 2.99 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL 0.99 1.00 WTOL 65 °C 65 °C Poff 0 W 0 W PTO 0 W 0 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.05 kW 1.03 kW Backup Heater 0.00 kW Annual energy consumption Qhe 3398 4338 kWh	Pdh Tj = Tbiv	7.57 kW	6.99 kW
Tdesignh 4.88 2.99 COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	COP Tj = Tbiv	4.93	3.16
Tdesignh 0.99 1.00 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL 0.99 1.00 WTOL 65 °C 65 °C Poff 0 W 0 W PTO 0 W 0 W PSB 12 W 12 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.05 kW 1.03 kW Backup Heater 0.00 kW Annual energy consumption Qhe 3398 4338 kWh	Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	7.55 kW	6.92 kW
Tdesignh WTOL 65 °C 65 °C 0 W 0 W PTO 0 W 0 W PSB 12 W 12 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.05 kW 1.03 kW Annual energy consumption Qhe 3398 4338 kWh	COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.88	2.99
Poff 0 W 0 W PTO 0 W 0 W PSB 12 W 12 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.05 kW 1.03 kW Backup Heater 0.00 kW Annual energy consumption Qhe 3398 4338 kWh		0.99	1.00
PTO 0 W 0 W PSB 12 W 12 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.05 kW 1.03 kW Backup Heater 0.00 kW Annual energy consumption Qhe 3398 4338 kWh	WTOL	65 °C	65 °C
PSB 12 W 12 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.05 kW 1.03 kW Backup Heater 0.00 kW Annual energy consumption Qhe 3398 4338 kWh	Poff	o w	0 W
PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.05 kW 1.03 kW Backup Heater 0.00 kW Annual energy consumption Qhe 3398 4338 kWh	РТО	o w	0 W
Supplementary Heater: Type of energy input Electricity Electricity 1.05 kW 1.03 kW Backup Heater 0.00 kW Annual energy consumption Qhe 3398 4338 kWh	PSB	12 W	12 W
Supplementary Heater: PSUP 1.05 kW 1.03 kW Backup Heater 0.00 kW Annual energy consumption Qhe 3398 4338 kWh	PCK	0 W	0 W
Backup Heater 0.00 kW Annual energy consumption Qhe 3398 4338 kWh	Supplementary Heater: Type of energy input	Electricity	Electricity
Annual energy consumption Qhe 3398 4338 kWh	Supplementary Heater: PSUP	1.05 kW	1.03 kW
	Backup Heater	0.00 kW	
	Annual energy consumption Qhe		4338 kWh

Warmer Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	205 %	143 %
Prated	7.61 kW	6.92 kW
SCOP	5.32	3.76
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.55 kW	6.92 kW
COP Tj = +2°C	4.85	2.99
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	7.61 kW	7.09 kW
$COP Tj = +7^{\circ}C$	5.15	3.45
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.73 kW	7.34 kW
COP Tj = 12°C	5.69	4.34
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.55 kW	6.92 kW



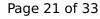


COP Tj = Tbiv	4.85	2.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.85	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
WTOL	65 °C	65 °C
Poff	0 W	0 W
РТО	0 W	0 W
PSB	12 W	12 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1897 kWh	2449 kWh

Colder Climate

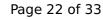
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	195 %	142 %





This information was genera		
Prated	12.50 kW	11.63 kW
SCOP	5.08	3.80
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7° C	7.65 kW	7.21 kW
$COP Tj = -7^{\circ}C$	5.56	3.80
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	7.70 kW	7.36 kW
COP Tj = +2°C	5.90	4.33
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	7.76 kW	7.76 kW
$COPTj = +7^{\circ}C$	6.16	4.86
Cdh Tj = $+7$ °C	0.99	0.99
Pdh Tj = 12°C	7.77 kW	7.58 kW
COP Tj = 12°C	6.24	5.25
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.65 kW	7.21 kW
COP Tj = Tbiv	5.56	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	6.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.11	3.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00





WTOL	65 °C	65 °C
Poff	0 W	0 W
РТО	o w	0 W
PSB	12 W	12 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.93 kW	4.67 kW
Annual energy consumption Qhe	6095 kWh	7633 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.62	7.10
COP Tj = -15°C (if TOL $<$ -20°C)	5.11	3.46
Cdh Tj = -15 °C	0.99	0.99

Domestic Hot Water (DHW)

Average Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	130 %	
СОР	3.14	
Heating up time	1:47 h:min	
Standby power input	63.0 W	
Reference hot water temperature	54.1 °C	
Mixed water at 40°C	293 I	

Warmer Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	130 %	
СОР	3.14	
Heating up time	1:47 h:min	
Standby power input	63.0 W	
Reference hot water temperature	54.1 °C	
Mixed water at 40°C	293 I	

Colder Climate



$$\operatorname{\textit{Page}}\xspace$ 24 of 33 This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	130 %	
СОР	3.14	
Heating up time	1:47 h:min	
Standby power input	63.0 W	
Reference hot water temperature	54.1 °C	
Mixed water at 40°C	293 I	



Model: VITOCAL 222-G BWT 221.B08 SC

Configure model		
Model name	VITOCAL 222-G BWT 221.B08 SC	
Application	Heating + DHW + low temp	
Units	Indoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	
Off-peak product	Yes	

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	7.54 kW	6.95 kW	
El input	1.62 kW	2.51 kW	
СОР	4.64	2.74	

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

Average Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	

EN 14825			
		Low temperature	Medium temperature
Pdesignh	7.57 kW		,
η_{s}	201 %	143 %	
Prated	8.60 kW	7.95 kW	
SCOP	5.23	3.79	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	7.57 kW	6.99 kW	
COP Tj = -7°C	4.93	3.16	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	7.63 kW	7.19 kW	
COP Tj = +2°C	5.23	3.77	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	7.69 kW	7.31 kW	
COP Tj = +7°C	5.56	4.23	
Cdh Tj = +7 °C	0.99	0.99	





Pdh Tj = 12°C	7.76 kW	7.45 kW
COP Tj = 12°C	5.91	4.80
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.57 kW	6.99 kW
COP Tj = Tbiv	4.93	3.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.88	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
WTOL	65 °C	65 °C
Poff	o w	0 W
РТО	o w	o w
PSB	12 W	12 W
РСК	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.03 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	3398 kWh	4338 kWh

Warmer Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	205 %	143 %
Prated	7.61 kW	6.92 kW
SCOP	5.32	3.76
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	7.55 kW	6.92 kW
COP Tj = +2°C	4.85	2.99
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	7.61 kW	7.09 kW
COP Tj = +7°C	5.15	3.45
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.73 kW	7.34 kW
COP Tj = 12°C	5.69	4.34
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.55 kW	6.92 kW





4.85	2.99
7.55 kW	6.92 kW
4.85	2.99
0.99	1.00
65 °C	65 °C
0 W	0 W
0 W	0 W
12 W	12 W
o w	0 W
Electricity	Electricity
0.00 kW	0.00 kW
1897 kWh	2449 kWh
	7.55 kW 4.85 0.99 65 °C 0 W 0 W 12 W 0 W Electricity 0.00 kW

Colder Climate

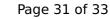
EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{S}	195 %	142 %





This information was genera		
Prated	12.50 kW	11.63 kW
SCOP	5.08	3.80
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7° C	7.65 kW	7.21 kW
$COPTj = -7^{\circ}C$	5.56	3.80
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	7.70 kW	7.36 kW
COP Tj = +2°C	5.90	4.33
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	7.76 kW	7.76 kW
$COPTj = +7^{\circ}C$	6.16	4.86
Cdh Tj = $+7$ °C	0.99	0.99
Pdh Tj = 12°C	7.77 kW	7.58 kW
COP Tj = 12°C	6.24	5.25
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.65 kW	7.21 kW
COP Tj = Tbiv	5.56	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	6.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.11	3.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
		





WTOL	65 °C	65 °C
Poff	0 W	0 W
РТО	o w	0 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.93 kW	4.67 kW
Annual energy consumption Qhe	6095 kWh	7633 kWh
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COP Tj = -15°C (if TOL $<$ -20°C)	5.11	3.46
Cdh Tj = -15 °C	0.99	0.99

Domestic Hot Water (DHW)

Average Climate

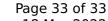


EN 16147		
Declared load profile	XL	
Efficiency ηDHW	130 %	
СОР	3.14	
Heating up time	1:47 h:min	
Standby power input	63.0 W	
Reference hot water temperature	54.1 °C	
Mixed water at 40°C	293	
Three water at 10 C	2551	

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	130 %
СОР	3.14
Heating up time	1:47 h:min
Standby power input	63.0 W
Reference hot water temperature	54.1 °C
Mixed water at 40°C	293 I

Colder Climate





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	130 %	
СОР	3.14	
Heating up time	1:47 h:min	
Standby power input	63.0 W	
Reference hot water temperature	54.1 °C	
Mixed water at 40°C	293 I	