

Summary of	Vitocal 2xx-G M B08	Reg. No.	011-1W0289
Certificate Holder	:		
Name	Viessmann Wärmepumpen G	mbH	
Address	Viessmannstr. 1	Zip	35107
City	Allendorf/Eder	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Name of testing laboratory	Heat Pump Test Center WPZ		
Subtype title	Vitocal 2xx-G M B08		
Heat Pump Type	Brine/Water		
Refrigerant	R410a		
Mass Of Refrigerant	1.95 kg		
Certification Date	11.07.2019		



# Model: VITOCAL 200-G BWC-M 201.B08

General Data	
Power supply	1x230V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	7.63 kW	6.81 kW
El input	1.67 kW	2.63 kW
СОР	4.54	2.59
Indoor water flow rate	1.30 m³/h	0.85 m³/h

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	8.50 kW		
$\eta_{s}$	214 %	151 %	
Prated	8.50 kW	7.94 kW	-
SCOP	5.54	3.98	
Tbiv	-7 °C	-7 °C	-
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	7.48 kW	6.98 kW	
COP Tj = -7°C	5.22	3.24	
Cdh	0.99	0.99	
Pdh Tj = +2°C	7.52 kW	7.23 kW	
COP Tj = +2°C	5.54	3.99	
Cdh	0.99	0.99	
Pdh Tj = +7°C	7.61 kW	7.37 kW	
COP Tj = +7°C	5.92	4.49	
Cdh	0.99	0.99	





Pdh Tj = 12°C	7.66 kW	7.48 kW
COP Tj = 12°C	6.29	5.05
Cdh	0.99	0.99
Pdh Tj = Tbiv	7.48 kW	6.98 kW
COP Tj = Tbiv	5.22	3.24
Pdh Tj = TOL	7.47 kW	6.90 kW
COP Tj = TOL	5.17	3.06
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	o w	0 W
PTO	0 W	0 W
PSB	12 W	12 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	1.04 kW	1.03 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	3167 kWh	4119 kWh
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#### 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
$\eta_{s}$	218 %	148 %
Prated	7.50 kW	6.92 kW
SCOP	5.64	3.90
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.50 kW	6.92 kW
COP Tj = +2°C	5.14	3.01
Cdh	0.99	0.99
Pdh Tj = +7°C	7.53 kW	7.12 kW
COP Tj = +7°C	5.44	3.54
Cdh	0.99	0.99
Pdh Tj = 12°C	7.62 kW	7.37 kW
COP Tj = 12°C	6.05	4.53
Cdh	0.99	0.99
Pdh Tj = Tbiv	7.50 kW	6.92 kW
COP Tj = Tbiv	5.14	3.01
Pdh Tj = TOL	7.50 kW	6.92 kW
COP Tj = TOL	5.14	3.01
Cdh	0.99	0.99





WTOL	65 °C	65 °C
Poff	o w	o w
РТО	o w	o w
PSB	12 W	12 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1778 kWh	2371 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
$\eta_{s}$	195 %	147 %
Prated	12.34 kW	11.56 kW
SCOP	5.08	3.87
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C





This information was generated by the HP KEYMARK database on 17 Dec 202				
Pdh Tj = -7°C	7.59 kW	7.18 kW		
COP Tj = -7°C	5.64	3.91		
Cdh	0.99	0.99		
Pdh Tj = +2°C	7.64 kW	7.33 kW		
COP Tj = +2°C	5.92	4.52		
Cdh	0.99	0.99		
Pdh Tj = $+7^{\circ}$ C	7.68 kW	7.48 kW		
$COPTj = +7^{\circ}C$	6.17	5.05		
Cdh	0.99	0.99		
Pdh Tj = 12°C	7.69 kW	7.53 kW		
COP Tj = 12°C	6.24	5.48		
Cdh	0.99	0.99		
Pdh Tj = Tbiv	7.59 kW	7.18 kW		
COP Tj = Tbiv	5.64	3.91		
Pdh Tj = TOL	7.47 kW	6.90 kW		
COP Tj = TOL	5.09	3.12		
Cdh	0.99	0.99		
WTOL	65 °C	65 °C		
Poff	o w	0 W		
РТО	o w	o w		
PSB	12 W	12 W		



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PCK	o w	o w
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	4.87 kW	4.66 kW
Annual energy consumption Qhe	6095 kWh	7356 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.53	7.05
COP Tj = -15°C (if TOL $<$ -20°C)	5.43	3.56
Cdh	0.99	0.99



# Model: VITOCAL 222-G BWT-M 221.B08

General Data		
Power supply	1x230V 50Hz	
Off-peak product	Yes	

# Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	7.63 kW	6.81 kW	
El input	1.67 kW	2.63 kW	
СОР	4.54	2.59	
Indoor water flow rate	1.30 m³/h	0.85 m³/h	

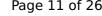
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

## **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	8.50 kW		
$\eta_{s}$	214 %	151 %	
Prated	8.50 kW	7.94 kW	
SCOP	5.54	3.98	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	7.48 kW	6.98 kW	
COP Tj = -7°C	5.22	3.24	
Cdh	0.99	0.99	
Pdh Tj = +2°C	7.52 kW	7.23 kW	
COP Tj = +2°C	5.54	3.99	
Cdh	0.99	0.99	
Pdh Tj = +7°C	7.61 kW	7.37 kW	
COP Tj = +7°C	5.92	4.49	
Cdh	0.99	0.99	





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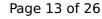
Pdh Tj = 12°C	7.66 kW	7.48 kW
COP Tj = 12°C	6.29	5.05
Cdh	0.99	0.99
Pdh Tj = Tbiv	7.48 kW	6.98 kW
COP Tj = Tbiv	5.22	3.24
Pdh Tj = TOL	7.47 kW	6.90 kW
COP Tj = TOL	5.17	3.06
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	0 W	0 W
РТО	0 W	0 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	1.04 kW	1.03 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	3167 kWh	4119 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
$\eta_{s}$	218 %	148 %
Prated	7.50 kW	6.92 kW
SCOP	5.64	3.90
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.50 kW	6.92 kW
COP Tj = +2°C	5.14	3.01
Cdh	0.99	0.99
Pdh Tj = +7°C	7.53 kW	7.12 kW
COP Tj = +7°C	5.44	3.54
Cdh	0.99	0.99
Pdh Tj = 12°C	7.62 kW	7.37 kW
COP Tj = 12°C	6.05	4.53
Cdh	0.99	0.99
Pdh Tj = Tbiv	7.50 kW	6.92 kW





COP Tj = Tbiv	5.14	3.01
Pdh Tj = TOL	7.50 kW	6.92 kW
COP Tj = TOL	5.14	3.01
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	o w	o w
РТО	o w	o w
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1778 kWh	2371 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
$\eta_{S}$	195 %	147 %





Prated	12.34 kW	11.56 kW
SCOP	5.08	3.87
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.59 kW	7.18 kW
COP Tj = -7°C	5.64	3.91
Cdh	0.99	0.99
Pdh Tj = +2°C	7.64 kW	7.33 kW
COP Tj = +2°C	5.92	4.52
Cdh	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	7.68 kW	7.48 kW
$COPTj = +7^{\circ}C$	6.17	5.05
Cdh	0.99	0.99
Pdh Tj = 12°C	7.69 kW	7.53 kW
COP Tj = 12°C	6.24	5.48
Cdh	0.99	0.99
Pdh Tj = Tbiv	7.59 kW	7.18 kW
COP Tj = Tbiv	5.64	3.91
Pdh Tj = TOL	7.47 kW	6.90 kW
COP Tj = TOL	5.09	3.12
Cdh	0.99	0.99





WTOL	65 °C	65 °C
Poff	o w	0 W
РТО	0 W	0 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	4.87 kW	4.66 kW
Annual energy consumption Qhe	6095 kWh	7356 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.53	7.05
COP Tj = $-15$ °C (if TOL< $-20$ °C)	5.43	3.56

0.99

0.99

Domestic Hot Water (DHW)

**Average Climate** 

Cdh

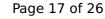


EN 16147	
Declared load profile	XL
Efficiency ηDHW	130 %
СОР	3.03
Heating up time	1:47 h:min
Standby power input	63.0 W
Reference hot water temperature	54.1 °C
Mixed water at 40°C	293 I

#### Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	130 %
СОР	3.03
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	3.03	
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-M 221.B08 SC

General Da	ata
Power supply	1x230V 50Hz
Off-peak product	Yes

# Heating

	EN 14511-2	
	Low temperature	Medium temperature
Heat output	7.63 kW	6.81 kW
El input	1.67 kW	2.63 kW
СОР	4.54	2.59
Indoor water flow rate	1.30 m³/h	0.85 m³/h

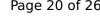
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## **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	8.50 kW		
$\eta_{s}$	214 %	151 %	
Prated	8.50 kW	7.94 kW	
SCOP	5.54	3.98	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	7.48 kW	6.98 kW	
COP Tj = -7°C	5.22	3.24	
Cdh	0.99	0.99	
Pdh Tj = +2°C	7.52 kW	7.23 kW	
COP Tj = +2°C	5.54	3.99	
Cdh	0.99	0.99	
Pdh Tj = +7°C	7.61 kW	7.37 kW	
COP Tj = +7°C	5.92	4.49	
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Pdh Tj = 12°C	7.66 kW	7.48 kW	
COP Tj = 12°C	6.29	5.05	
Cdh	0.99	0.99	
Pdh Tj = Tbiv	7.48 kW	6.98 kW	
COP Tj = Tbiv	5.22	3.24	
Pdh Tj = TOL	7.47 kW	6.90 kW	
COP Tj = TOL	5.17	3.06	
Cdh	0.99	0.99	
WTOL	65 °C	65 °C	
Poff	o w	o w	
РТО	o w	o w	
PSB	12 W	12 W	
PCK	o w	0 W	
Supplementary Heater: Type of energy input	electric	electric	
Supplementary Heater: PSUP	1.04 kW	1.03 kW	
Backup Heater	0.00 kW		
Annual energy consumption Qhe	3167 kWh	4119 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
$\eta_{s}$	218 %	148 %
Prated	7.50 kW	6.92 kW
SCOP	5.64	3.90
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.50 kW	6.92 kW
COP Tj = +2°C	5.14	3.01
Cdh	0.99	0.99
Pdh Tj = +7°C	7.53 kW	7.12 kW
COP Tj = +7°C	5.44	3.54
Cdh	0.99	0.99
Pdh Tj = 12°C	7.62 kW	7.37 kW
COP Tj = 12°C	6.05	4.53
Cdh	0.99	0.99
Pdh Tj = Tbiv	7.50 kW	6.92 kW



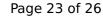


COP Tj = Tbiv	5.14	3.01
Pdh Tj = TOL	7.50 kW	6.92 kW
COP Tj = TOL	5.14	3.01
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	o w	o w
РТО	o w	o w
PSB	12 W	12 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1778 kWh	2371 kWh

## Colder Climate

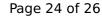
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	195 %	147 %





		REYMARK database on 17 Dec 202
Prated	12.34 kW	11.56 kW
SCOP	5.08	3.87
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.59 kW	7.18 kW
COP Tj = -7°C	5.64	3.91
Cdh	0.99	0.99
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Cdh	0.99	0.99
Pdh Tj = 12°C	7.69 kW	7.53 kW
COP Tj = 12°C	6.24	5.48
Cdh	0.99	0.99
Pdh Tj = Tbiv	7.59 kW	7.18 kW
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	'	





WTOL	65 °C	65 °C
Poff	0 W	0 W
РТО	o w	o w
PSB	12 W	12 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	4.87 kW	4.66 kW
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COP Tj = -15°C (if TOL<-20°C)	5.43	3.56
Cdh	0.99	0.99

Domestic Hot Water (DHW)

**Average Climate** 

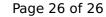


EN 16147		
Declared load profile	XL	
Efficiency ηDHW	130 %	
СОР	3.03	
Heating up time	1:47 h:min	
Standby power input	63.0 W	
Reference hot water temperature	54.1 °C	
Mixed water at 40°C	293	

#### Warmer Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	130 %	
СОР	3.03	
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	3.03	
Heating up time	1:47 h:min	
Standby power input	63.0 W	
Reference hot water temperature	54.1 °C	
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