

Summary of	Vitocal 2xx-G M B10	Reg. No.	011-1W0290
Certificate Holder		-	
Name	Viessmann Wärmepumpen	GmbH	
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 B10		
Heat Pump Type	Brine/Water		
Refrigerant	R410a		
Mass Of Refrigerant	2.4 kg		
Certification Date	11.07.2019		



Model: VITOCAL 200-G BWC-M 201.B10

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	10.14 kW	9.21 kW	
El input	2.31 kW	3.69 kW	
СОР	4.39	2.50	
Indoor water flow rate	1.75 m³/h	1.01 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	46 dB(A)	46 dB(A)

EN 14825			
		Low temperature	Medium temperature
Pdesignh	11.70 kW		
η_{s}	194 %	143 %	
Prated	11.70 kW	10.83 kW	
SCOP	5.06	3.76	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	10.29 kW	9.53 kW	
COP Tj = -7°C	4.80	3.18	
Cdh	0.99	0.99	
Pdh Tj = +2°C	10.35 kW	9.79 kW	
COP Tj = +2°C	5.08	3.75	
Cdh	0.99	0.99	
Pdh Tj = +7°C	10.38 kW	9.96 kW	
COP Tj = +7°C	5.34	4.19	
Cdh	0.99	0.99	





			-
Pdh Tj = 12°C	10.46 kW	10.12 kW	
COP Tj = 12°C	5.63	4.65	
Cdh	0.99	0.99	
Pdh Tj = Tbiv	10.29 kW	9.53 kW	
COP Tj = Tbiv	4.80	3.18	
Pdh Tj = TOL	10.25 kW	9.43 kW	
COP Tj = TOL	4.73	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	o w	
Supplementary Heater: Type of energy input	electric	electric	
Supplementary Heater: PSUP	1.45 kW	1.40 kW	
Backup Heater	0.00 kW		-
Annual energy consumption Qhe	4781 kWh	5948 kWh	
	1	1	1

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)



CEN heat pump KEYMARK

EN 14825			
	Low temperature	Medium temperature	
η _s	197 %	142 %	
Prated	10.27 kW	9.45 kW	
SCOP	5.12	3.75	
Tbiv	2 °C	2 °C	
TOL	2 °C	2 °C	
Pdh Tj = +2°C	10.22 kW	9.45 kW	
COP Tj = +2°C	4.74	3.02	
Cdh	0.99	0.99	
Pdh Tj = +7°C	10.26 kW	9.65 kW	
COP Tj = +7°C	4.99	3.45	
Cdh	0.99	0.99	
Pdh Tj = 12°C	10.39 kW	10.00 kW	
COP Tj = 12°C	5.43	4.27	
Cdh	0.99	0.99	
Pdh Tj = Tbiv	10.22 kW	9.45 kW	
COP Tj = Tbiv	4.74	3.02	
Pdh Tj = TOL	10.22 kW	9.45 kW	
COP Tj = TOL	4.74	3.02	
Cdh	0.99	0.99	





WTOL	65 °C	65 °C
Poff	o w	o w
РТО	0 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	2682 kWh	3369 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	46 dB(A)	46 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	191 %	141 %
Prated	16.96 kW	15.87 kW
SCOP	4.97	3.72
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C





Pdh Tj = -7°C	10.37 kW	9.80 kW
COP Tj = -7°C	5.54	3.77
Cdh	0.99	0.99
Pdh Tj = +2°C	10.37 kW	10.03 kW
COP Tj = +2°C	5.82	4.28
Cdh	0.99	0.99
Pdh Tj = +7°C	10.49 kW	10.16 kW
COP Tj = +7°C	6.09	4.71
Cdh	0.99	0.99
Pdh Tj = 12°C	10.46 kW	10.26 kW
COP Tj = 12°C	6.09	5.07
Cdh	0.99	0.99
Pdh Tj = Tbiv	10.37 kW	9.80 kW
COP Tj = Tbiv	5.54	3.77
Pdh Tj = TOL	10.25 kW	9.48 kW
COP Tj = TOL	5.08	3.11
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	0 W	0 W
РТО	o w	0 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	6.71 kW	6.93 kW
Annual energy consumption Qhe	8407 kWh	10514 kWh
Pdh Tj = -15°C (if TOL<-20°C)	10.32	9.68
COP Tj = -15°C (if TOL $<$ -20°C)	5.43	3.47
Cdh	0.99	0.99



Model: VITOCAL 222-G BWT-M 221.B10

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

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	10.14 kW	9.21 kW
El input	2.31 kW	3.69 kW
СОР	4.39	2.50
Indoor water flow rate	1.75 m³/h	1.01 m³/h

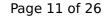
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)

EN 14825			
		Low temperature	Medium temperature
Pdesignh	11.70 kW		
η_{s}	194 %	143 %	
Prated	11.70 kW	10.83 kW	
SCOP	5.06	3.76	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	10.29 kW	9.53 kW	
COP Tj = -7°C	4.80	3.18	
Cdh	0.99	0.99	
Pdh Tj = +2°C	10.35 kW	9.79 kW	
COP Tj = +2°C	5.08	3.75	
Cdh	0.99	0.99	
Pdh Tj = +7°C	10.38 kW	9.96 kW	
COP Tj = +7°C	5.34	4.19	
Cdh	0.99	0.99	





			t database on 17	
Pdh Tj = 12°C	10.46 kW	10.12 kW		
COP Tj = 12°C	5.63	4.65		
Cdh	0.99	0.99		
Pdh Tj = Tbiv	10.29 kW	9.53 kW		
COP Tj = Tbiv	4.80	3.18		
Pdh Tj = TOL	10.25 kW	9.43 kW		
COP Tj = TOL	4.73	3.01		
Cdh	0.99	0.99		
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	electric	electric		
Supplementary Heater: PSUP	1.45 kW	1.40 kW		
Backup Heater	0.00 kW			
Annual energy consumption Qhe	4781 kWh	5948 kWh		

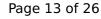
Warmer Climate



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EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	197 %	142 %
Prated	10.27 kW	9.45 kW
SCOP	5.12	3.75
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.22 kW	9.45 kW
COP Tj = +2°C	4.74	3.02
Cdh	0.99	0.99
Pdh Tj = +7°C	10.26 kW	9.65 kW
COP Tj = +7°C	4.99	3.45
Cdh	0.99	0.99
Pdh Tj = 12°C	10.39 kW	10.00 kW
COP Tj = 12°C	5.43	4.27
Cdh	0.99	0.99
Pdh Tj = Tbiv	10.22 kW	9.45 kW





COP Tj = Tbiv	4.74	3.02
Pdh Tj = TOL	10.22 kW	9.45 kW
COP Tj = TOL	4.74	3.02
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	o w	o w
РТО	0 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	2682 kWh	3369 kWh

Colder Climate

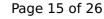
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)

	EN 14825	
	Low temperature	Medium temperature
η_{S}	191 %	141 %





Prated	16.96 kW	15.87 kW
SCOP	4.97	3.72
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	10.37 kW	9.80 kW
$COP Tj = -7^{\circ}C$	5.54	3.77
Cdh	0.99	0.99
Pdh Tj = +2°C	10.37 kW	10.03 kW
$COP Tj = +2^{\circ}C$	5.82	4.28
Cdh	0.99	0.99
Pdh Tj = +7°C	10.49 kW	10.16 kW
$COP Tj = +7^{\circ}C$	6.09	4.71
Cdh	0.99	0.99
Pdh Tj = 12°C	10.46 kW	10.26 kW
COP Tj = 12°C	6.09	5.07
Cdh	0.99	0.99
Pdh Tj = Tbiv	10.37 kW	9.80 kW
COP Tj = Tbiv	5.54	3.77
Pdh Tj = TOL	10.25 kW	9.48 kW
COP Tj = TOL	5.08	3.11
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	6.71 kW	6.93 kW
Annual energy consumption Qhe	8407 kWh	10514 kWh
Pdh Tj = -15°C (if TOL<-20°C)	10.32	9.68
COP Tj = -15°C (if TOL<-20°C)	5.43	3.47
Cdh	0.99	0.99

Domestic Hot Water (DHW)

Average Climate



EN 16147	
Declared load profile	XL
Efficiency ηDHW	130 %
СОР	3.01
Heating up time	1:14 h:min
Standby power input	63.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	302 I

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	130 %
СОР	3.01
Heating up time	1:14 h:min
Standby power input	63.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	302 I

Colder Climate





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EN 16147	
Declared load profile	XL
Efficiency ηDHW	130 %
СОР	3.01
Heating up time	1:14 h:min
Standby power input	63.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	302 I



Model: VITOCAL 222-G BWT-M 221.B10 SC

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

Heating

	EN 14511-2	
	Low temperature	Medium temperature
Heat output	10.14 kW	9.21 kW
El input	2.31 kW	3.69 kW
СОР	4.39	2.50
Indoor water flow rate	1.75 m³/h	1.01 m³/h

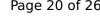
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate



	EN 12102-1	
	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)

	EN 1482!	5	
		Low temperature	Medium temperature
Pdesignh	11.70 kW		
η_{s}	194 %	143 %	
Prated	11.70 kW	10.83 kW	
SCOP	5.06	3.76	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	10.29 kW	9.53 kW	
COP Tj = -7°C	4.80	3.18	
Cdh	0.99	0.99	
Pdh Tj = +2°C	10.35 kW	9.79 kW	
COP Tj = +2°C	5.08	3.75	
Cdh	0.99	0.99	
Pdh Tj = +7°C	10.38 kW	9.96 kW	
COP Tj = +7°C	5.34	4.19	
Cdh	0.99	0.99	





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COP Tj = 12°C 5.63 4.65 Cdh 0.99 0.99 10.29 kW 9.53 kW COP Tj = Tbiv 4.80 3.18 10.25 kW 9.43 kW COP Tj = TOL 4.73 3.01 Cdh 0.99 0.99 MTOL 65 °C 65 °C 0 W 0 W PTO 0 W 0 W COP TO 0 W 0 W COP TO 12 W 12 W 12 W COP TO COR TO COR TJ = TOL 14.5 kW 1.40 kW COP TO COR TJ = TOL 10.25 kW 9.43 kW 1.40 kW 1.40 kW 1.40 kW 1.40 kW			-
Cdh 0.99 0.99 Pdh Tj = Tbiv 10.29 kW 9.53 kW COP Tj = Tbiv 4.80 3.18 Pdh Tj = TOL 10.25 kW 9.43 kW COP Tj = TOL 4.73 3.01 Cdh 0.99 0.99 MTOL 65 °C 65 °C Poff 0 W 0 W POTO 0 W 0 W POCK 0 W 0 W Supplementary Heater: Type of energy input electric Supplementary Heater: PSUP 1.45 kW 1.40 kW Backup Heater 0.00 kW	Pdh Tj = 12°C	10.46 kW	10.12 kW
Path Tj = Tbiv 10.29 kW 9.53 kW COP Tj = Tbiv 4.80 3.18 Path Tj = TOL 10.25 kW 9.43 kW COP Tj = TOL 4.73 3.01 Cath 0.99 0.99 NTOL 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 electric Supplementary Heater: PSUP 1.45 kW 1.40 kW Backup Heater 0.00 kW	COP Tj = 12°C	5.63	4.65
### COP Tj = Tbiv ### 4.80 3.18 ### COP Tj = TOL	Cdh	0.99	0.99
Podh Tj = TOL 10.25 kW 9.43 kW 4.73 3.01 Cdh 0.99 0.99 MTOL 65 °C 65 °C 0 W 0 W 0 W 0 W 0 W 0 W 0 W 0 W 0 W 0 W	Pdh Tj = Tbiv	10.29 kW	9.53 kW
### COP Tj = TOL	COP Tj = Tbiv	4.80	3.18
Och Och Och Och Och Och Och Och	Pdh Tj = TOL	10.25 kW	9.43 kW
MTOL 65 °C 65 °C Poff 0 W 0 W 0 W 0 W 0 W 0 W 0 W 0 W 0 W 0 W	COP Tj = TOL	4.73	3.01
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 electric electric Supplementary Heater: PSUP 1.45 kW 1.40 kW Backup Heater 0.00 kW	Cdh	0.99	0.99
PTO 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 1.45 kW 1.40 kW Backup Heater 0.00 kW	WTOL	65 °C	65 °C
PSB 12 W 12 W PCK 0 W 0 W Supplementary Heater: Type of energy input electric electric Supplementary Heater: PSUP 1.45 kW 1.40 kW Backup Heater 0.00 kW	Poff	o w	0 W
PCK 0 W 0 W Supplementary Heater: Type of energy input electric electric Supplementary Heater: PSUP 1.45 kW 1.40 kW Backup Heater 0.00 kW	РТО	0 W	0 W
Supplementary Heater: Type of energy input electric electric Supplementary Heater: PSUP 1.45 kW 1.40 kW Backup Heater 0.00 kW	PSB	12 W	12 W
Supplementary Heater: PSUP 1.45 kW 1.40 kW Backup Heater 0.00 kW	PCK	0 W	0 W
Backup Heater 0.00 kW	Supplementary Heater: Type of energy input	electric	electric
	Supplementary Heater: PSUP	1.45 kW	1.40 kW
Annual energy consumption Qhe 4781 kWh 5948 kWh	Backup Heater	0.00 kW	
	Annual energy consumption Qhe	4781 kWh	5948 kWh

Warmer Climate



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EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	197 %	142 %
Prated	10.27 kW	9.45 kW
SCOP	5.12	3.75
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.22 kW	9.45 kW
COP Tj = +2°C	4.74	3.02
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COP Tj = TOL	4.74	3.02
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	o w	o w
РТО	0 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	2682 kWh	3369 kWh

Colder Climate

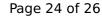
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	191 %	141 %





This information was generated by the HP KEYMARK database on 17 Dec 20			
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SCOP	4.97	3.72	
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COP Tj = +7°C	6.09	4.71	
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COP Tj = TOL	5.08	3.11	
Cdh	0.99	0.99	





WTOL	65 °C	65 °C
Poff	o w	o w
РТО	0 W	0 W
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Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	6.71 kW	6.93 kW
Annual energy consumption Qhe	8407 kWh	10514 kWh
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Domestic Hot Water (DHW)

Average Climate



EN 16147	
Declared load profile	XL
Efficiency ηDHW	130 %
СОР	3.01
Heating up time	1:14 h:min
Standby power input	63.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	302 I

Warmer Climate

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Colder Climate





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СОР	3.01	
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Reference hot water temperature	54.2 °C	
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