Subtype Vitocal 2xx-G M B08	
Certificate Holder	Viessmann Climate Solutions GmbH & Co. KG
Address	Viessmannstr. 1
ZIP	35107
City	Allendorf/Eder
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Vitocal 2xx-G M B08
Registration number	011-1W0289
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	1.7 kg
Certification Date	11.07.2019

Model VITOCAL 200-G BWC-M 201.B08	
Model name	VITOCAL 200-G BWC-M 201.B08
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Colder, Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Brine/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	7.57 kW	7.00 kW
El input	1.75 kW	2.69 kW
COP	4.33	2.60

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	44 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	180 %	128 %
Prated	8.50 kW	7.94 kW
SCOP	4.70	3.40
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.59 kW	7.06 kW
COP Tj = -7°C	4.47	2.85
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = +2°C	7.67 kW	7.23 kW
COP Tj = +2°C	4.70	3.38
Cdh Tj = +2 °C	0.992	0.993
Pdh Tj = +7°C	7.73 kW	7.37 kW
COP Tj = +7°C	4.97	3.78

Cdh Tj = +7 °C	0.991	0.993
Pdh Tj = 12°C	7.82 kW	7.51 kW
COP Tj = 12°C	5.26	4.22
Cdh Tj = +12 °C	0.991	0.992
Pdh Tj = Tbiv	7.59 kW	7.06 kW
COP Tj = Tbiv	4.47	2.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	7.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.33	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.995
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.93 kW	0.94 kW
Annual energy consumption Qhe	3736 kWh	4826 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	44 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	171 %	129 %
Prated	12.34 kW	11.56 kW
SCOP	4.48	3.41
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.73 kW	7.29 kW
COP Tj = -7°C	4.98	3.52
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	7.77 kW	7.40 kW
COP Tj = +2°C	5.13	3.85
Cdh Tj = +2 °C	0.991	0.993
Pdh Tj = +7°C	7.80 kW	7.51 kW
COP Tj = +7°C	5.24	4.20
Cdh Tj = +7 °C	0.991	0.992
Pdh Tj = 12°C	7.80 kW	7.58 kW
COP Tj = 12°C	5.23	4.46
Cdh Tj = +12 °C	0.991	0.992
Pdh Tj = Tbiv	7.73 kW	7.29 kW
COP Tj = Tbiv	4.98	3.52

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	7.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.33	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.995
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.77 kW	4.56 kW
Annual energy consumption Qhe	6790 kWh	8347 kWh
Pdh Tj = -15°C (if TOL	7.53	7.05
COP Tj = -15°C (if TOL	5.43	3.56
Cdh Tj = -15 °C	0.99	0.99

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	44 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	180 %	127 %
Prated	7.50 kW	6.92 kW
SCOP	4.71	3.38
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.58 kW	7.00 kW
COP Tj = +2°C	4.32	2.60
Cdh Tj = +2 °C	0.992	0.995
Pdh Tj = +7°C	7.65 kW	7.14 kW
COP Tj = +7°C	4.60	3.09
Cdh Tj = +7 °C	0.992	0.994
Pdh Tj = 12°C	7.77 kW	7.42 kW
COP Tj = 12°C	5.03	3.91
Cdh Tj = +12 °C	0.991	0.993
Pdh Tj = Tbiv	7.58 kW	7.00 kW
COP Tj = Tbiv	4.32	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.58 kW	7.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.32	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.995

WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	15 W	15 W
PSB	15 W	15 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	2129 kWh	2733 kWh

EN 14825 | Average Climate	
Pdesignh	8.50 kW
Backup Heater	0.00 kW

Model VITOCAL 222-G BWT-M 221.B08	
Model name	VITOCAL 222-G BWT-M 221.B08
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

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

Brine/Water EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	127 %
COP	3.08
Heating up time	1:36 h:min
Standby power input	35.0 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	282 l

EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	127 %
COP	3.08
Heating up time	1:36 h:min
Standby power input	35.0 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	282 l

EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	127 %
COP	3.08
Heating up time	1:36 h:min
Standby power input	35.0 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	282 l

EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	7.57 kW	7.00 kW
El input	1.75 kW	2.69 kW
COP	4.33	2.60

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	44 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	180 %	128 %
Prated	8.50 kW	7.94 kW
SCOP	4.70	3.40
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.59 kW	7.06 kW
COP Tj = -7°C	4.47	2.85
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = +2°C	7.67 kW	7.23 kW
COP Tj = +2°C	4.70	3.38
Cdh Tj = +2 °C	0.992	0.993
Pdh Tj = +7°C	7.73 kW	7.37 kW
COP Tj = +7°C	4.97	3.78
Cdh Tj = +7 °C	0.991	0.993
Pdh Tj = 12°C	7.82 kW	7.51 kW
COP Tj = 12°C	5.26	4.22
Cdh Tj = +12 °C	0.991	0.992
Pdh Tj = Tbiv	7.59 kW	7.06 kW
COP Tj = Tbiv	4.47	2.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	7.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.33	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.995
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	0.93 kW	0.94 kW
Annual energy consumption Qhe	3736 kWh	4826 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	44 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	171 %	129 %
Prated	12.34 kW	11.56 kW
SCOP	4.48	3.41
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.73 kW	7.29 kW
COP Tj = -7°C	4.98	3.52
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	7.77 kW	7.40 kW
COP Tj = +2°C	5.13	3.85
Cdh Tj = +2 °C	0.991	0.993
Pdh Tj = +7°C	7.80 kW	7.51 kW
COP Tj = +7°C	5.24	4.20
Cdh Tj = +7 °C	0.991	0.992
Pdh Tj = 12°C	7.80 kW	7.58 kW
COP Tj = 12°C	5.23	4.46
Cdh Tj = +12 °C	0.991	0.992
Pdh Tj = Tbiv	7.73 kW	7.29 kW
COP Tj = Tbiv	4.98	3.52
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	7.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.33	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.995
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.77 kW	4.56 kW
Annual energy consumption Qhe	6790 kWh	8347 kWh
Pdh Tj = -15°C (if TOL	7.53	7.05
COP Tj = -15°C (if TOL	5.43	3.56
Cdh Tj = -15 °C	0.99	0.99

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	44 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	180 %	127 %
Prated	7.50 kW	6.92 kW
SCOP	4.71	3.38
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.58 kW	7.00 kW
COP Tj = +2°C	4.32	2.60
Cdh Tj = +2 °C	0.992	0.995
Pdh Tj = +7°C	7.65 kW	7.14 kW
COP Tj = +7°C	4.60	3.09
Cdh Tj = +7 °C	0.992	0.994
Pdh Tj = 12°C	7.77 kW	7.42 kW
COP Tj = 12°C	5.03	3.91
Cdh Tj = +12 °C	0.991	0.993
Pdh Tj = Tbiv	7.58 kW	7.00 kW
COP Tj = Tbiv	4.32	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.58 kW	7.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.32	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.995
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	15 W	15 W
PSB	15 W	15 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	2129 kWh	2733 kWh

EN 14825 | Average Climate

Pdesignh	8.50 kW
Backup Heater	0.00 kW

Model VITOCAL 222-G BWT-M 221.B08 SC	
Model name	VITOCAL 222-G BWT-M 221.B08 SC
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

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

Brine/Water EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	127 %
COP	3.08
Heating up time	1:36 h:min
Standby power input	35.0 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	282 l

EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	127 %
COP	3.08
Heating up time	1:36 h:min
Standby power input	35.0 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	282 l

EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	127 %
COP	3.08
Heating up time	1:36 h:min
Standby power input	35.0 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	282 l

EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	7.57 kW	7.00 kW
El input	1.75 kW	2.69 kW
COP	4.33	2.60

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	44 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	180 %	128 %
Prated	8.50 kW	7.94 kW
SCOP	4.70	3.40
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.59 kW	7.06 kW
COP Tj = -7°C	4.47	2.85
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = +2°C	7.67 kW	7.23 kW
COP Tj = +2°C	4.70	3.38
Cdh Tj = +2 °C	0.992	0.993
Pdh Tj = +7°C	7.73 kW	7.37 kW
COP Tj = +7°C	4.97	3.78
Cdh Tj = +7 °C	0.991	0.993
Pdh Tj = 12°C	7.82 kW	7.51 kW
COP Tj = 12°C	5.26	4.22
Cdh Tj = +12 °C	0.991	0.992
Pdh Tj = Tbiv	7.59 kW	7.06 kW
COP Tj = Tbiv	4.47	2.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	7.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.33	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.995
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	0.93 kW	0.94 kW
Annual energy consumption Qhe	3736 kWh	4826 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	44 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	171 %	129 %
Prated	12.34 kW	11.56 kW
SCOP	4.48	3.41
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.73 kW	7.29 kW
COP Tj = -7°C	4.98	3.52
Cdh Tj = -7 °C	0.991	0.993
Pdh Tj = +2°C	7.77 kW	7.40 kW
COP Tj = +2°C	5.13	3.85
Cdh Tj = +2 °C	0.991	0.993
Pdh Tj = +7°C	7.80 kW	7.51 kW
COP Tj = +7°C	5.24	4.20
Cdh Tj = +7 °C	0.991	0.992
Pdh Tj = 12°C	7.80 kW	7.58 kW
COP Tj = 12°C	5.23	4.46
Cdh Tj = +12 °C	0.991	0.992
Pdh Tj = Tbiv	7.73 kW	7.29 kW
COP Tj = Tbiv	4.98	3.52
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	7.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.33	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.995
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.77 kW	4.56 kW
Annual energy consumption Qhe	6790 kWh	8347 kWh
Pdh Tj = -15°C (if TOL	7.53	7.05
COP Tj = -15°C (if TOL	5.43	3.56
Cdh Tj = -15 °C	0.99	0.99

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	44 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	180 %	127 %
Prated	7.50 kW	6.92 kW
SCOP	4.71	3.38
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.58 kW	7.00 kW
COP Tj = +2°C	4.32	2.60
Cdh Tj = +2 °C	0.992	0.995
Pdh Tj = +7°C	7.65 kW	7.14 kW
COP Tj = +7°C	4.60	3.09
Cdh Tj = +7 °C	0.992	0.994
Pdh Tj = 12°C	7.77 kW	7.42 kW
COP Tj = 12°C	5.03	3.91
Cdh Tj = +12 °C	0.991	0.993
Pdh Tj = Tbiv	7.58 kW	7.00 kW
COP Tj = Tbiv	4.32	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.58 kW	7.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.32	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.995
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	15 W	15 W
PSB	15 W	15 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	2129 kWh	2733 kWh

EN 14825 | Average Climate

Pdesignh	8.50 kW
Backup Heater	0.00 kW