

Subtype Vitocal 2xx-G M B06

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 B06
Registration number	011-1W0288
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	1.2 kg
Certification Date	11.07.2019

**Model VITOCAL 200-G BWC-M 201.B06**

Model name	VITOCAL 200-G BWC-M 201.B06
Application	Heating (medium 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	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	5.83 kW	5.22 kW
EI input	1.35 kW	1.95 kW
COP	4.32	2.68

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	177 %	128 %
Prated	6.37 kW	5.75 kW
SCOP	4.62	3.40
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.84 kW	5.28 kW
COP Tj = -7°C	4.41	2.89
Cdh Tj = -7 °C	0.990	0.992
Pdh Tj = +2°C	5.92 kW	5.48 kW
COP Tj = +2 °C	4.66	3.41
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	5.95 kW	5.57 kW
COP Tj = +7°C	4.86	3.74

Cdh Tj = +7 °C	0.989	0.991
Pdh Tj = 12°C	6.03 kW	5.69 kW
COP Tj = 12°C	5.10	4.13
Cdh Tj = +12 °C	0.989	0.990
Pdh Tj = Tbiv	5.84 kW	5.28 kW
COP Tj = Tbiv	4.41	2.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.83 kW	5.22 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.32	2.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.993
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	0.54 kW	0.53 kW
Annual energy consumption Qhe	2848 kWh	3497 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	169 %	127 %
Prated	9.15 kW	8.41 kW
SCOP	4.42	3.39
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.95 kW	5.49 kW
COP Tj = -7°C	4.87	3.49
Cdh Tj = -7 °C	0.989	0.991
Pdh Tj = +2°C	6.00 kW	5.59 kW
COP Tj = +2°C	5.02	3.81
Cdh Tj = +2 °C	0.989	0.990
Pdh Tj = +7°C	6.03 kW	5.68 kW
COP Tj = +7°C	5.14	4.10
Cdh Tj = +7 °C	0.989	0.990
Pdh Tj = 12°C	6.04 kW	5.75 kW
COP Tj = 12°C	5.14	4.33
Cdh Tj = +12 °C	0.989	0.990
Pdh Tj = Tbiv	5.95 kW	5.49 kW
COP Tj = Tbiv	4.87	3.49

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.83 kW	5.22 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.32	2.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.993
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	3.32 kW	3.19 kW
Annual energy consumption Qhe	5103 kWh	6123 kWh
Pdh Tj = -15°C (if TOL)	5.82	5.23
COP Tj = -15°C (if TOL)	4.85	2.91
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	177 %	127 %
Prated	5.59 kW	5.22 kW
SCOP	4.62	3.37
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.83 kW	5.22 kW
COP Tj = +2°C	4.32	2.68
Cdh Tj = +2 °C	0.993	0.993
Pdh Tj = +7°C	5.89 kW	5.37 kW
COP Tj = +7°C	4.56	3.13
Cdh Tj = +7 °C	0.992	0.992
Pdh Tj = 12°C	5.97 kW	5.62 kW
COP Tj = 12°C	4.94	3.86
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	5.83 kW	5.22 kW
COP Tj = Tbiv	4.32	2.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.83 kW	5.22 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.32	2.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.993

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	1618 kWh	2014 kWh

EN 14825 | Average Climate

Pdesignh	6.37 kW
Backup Heater	0.00 kW

**Model VITOCAL 222-G BWT-M 221.B06**

Model name	VITOCAL 222-G BWT-M 221.B06
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 $\eta_{DHW}$	129 %
COP	3.12
Heating up time	2:10 h:min
Standby power input	35.0 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	303 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	129 %
COP	3.12
Heating up time	2:10 h:min
Standby power input	35.0 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	303 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	129 %
COP	3.12
Heating up time	2:10 h:min
Standby power input	35.0 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	303 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	
<b>EN 14511-2   Heating</b>		
Heat output	Low temperature	Medium temperature
5.83 kW	5.22 kW	
El input	1.35 kW	1.95 kW
COP	4.32	2.68
<b>EN 12102-1   Average Climate</b>		
Sound power level indoor	Low temperature	Medium temperature
40 dB(A)	40 dB(A)	
<b>EN 14825   Average Climate</b>		
ηs	Low temperature	Medium temperature
177 %	128 %	
Prated	6.37 kW	5.75 kW
SCOP	4.62	3.40
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.84 kW	5.28 kW
COP Tj = -7°C	4.41	2.89
Cdh Tj = -7 °C	0.990	0.992
Pdh Tj = +2°C	5.92 kW	5.48 kW
COP Tj = +2°C	4.66	3.41
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	5.95 kW	5.57 kW
COP Tj = +7°C	4.86	3.74
Cdh Tj = +7 °C	0.989	0.991
Pdh Tj = 12°C	6.03 kW	5.69 kW
COP Tj = 12°C	5.10	4.13
Cdh Tj = +12 °C	0.989	0.990
Pdh Tj = Tbiv	5.84 kW	5.28 kW
COP Tj = Tbiv	4.41	2.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.83 kW	5.22 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.32	2.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.993
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	0.54 kW	0.53 kW
Annual energy consumption Qhe	2848 kWh	3497 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
$\eta_s$	169 %	127 %
P <sub>rated</sub>	9.15 kW	8.41 kW
SCOP	4.42	3.39
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-22 °C	-22 °C
P <sub>dh Tj = -7°C</sub>	5.95 kW	5.49 kW
COP T <sub>j</sub> = -7°C	4.87	3.49
C <sub>dh Tj = -7 °C</sub>	0.989	0.991
P <sub>dh Tj = +2°C</sub>	6.00 kW	5.59 kW
COP T <sub>j</sub> = +2°C	5.02	3.81
C <sub>dh Tj = +2 °C</sub>	0.989	0.990
P <sub>dh Tj = +7°C</sub>	6.03 kW	5.68 kW
COP T <sub>j</sub> = +7°C	5.14	4.10
C <sub>dh Tj = +7 °C</sub>	0.989	0.990
P <sub>dh Tj = 12°C</sub>	6.04 kW	5.75 kW
COP T <sub>j</sub> = 12°C	5.14	4.33
C <sub>dh Tj = +12 °C</sub>	0.989	0.990
P <sub>dh Tj = T<sub>biv</sub></sub>	5.95 kW	5.49 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.87	3.49
P <sub>dh Tj = TOL or P<sub>dh Tj = T<sub>designh</sub></sub> if TOL &lt; T<sub>designh</sub></sub>	5.83 kW	5.22 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	4.32	2.68
C <sub>dh Tj = TOL or P<sub>dh Tj = T<sub>designh</sub></sub> if TOL &lt; T<sub>designh</sub></sub>	0.990	0.993
WTOL	65 °C	65 °C
P <sub>off</sub>	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	3.32 kW	3.19 kW
Annual energy consumption Qhe	5103 kWh	6123 kWh
P <sub>dh Tj = -15°C (if TOL</sub>	5.82	5.23
COP T <sub>j</sub> = -15°C (if TOL	4.85	2.91
C <sub>dh Tj = -15 °C</sub>	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
<b>EN 14825   Warmer Climate</b>		
	Low temperature	Medium temperature
ηs	177 %	127 %
P <sub>rated</sub>	5.59 kW	5.22 kW
SCOP	4.62	3.37
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
Pdh T <sub>j</sub> = +2°C	5.83 kW	5.22 kW
COP T <sub>j</sub> = +2°C	4.32	2.68
Cdh T <sub>j</sub> = +2 °C	0.993	0.993
Pdh T <sub>j</sub> = +7°C	5.89 kW	5.37 kW
COP T <sub>j</sub> = +7°C	4.56	3.13
Cdh T <sub>j</sub> = +7 °C	0.992	0.992
Pdh T <sub>j</sub> = 12°C	5.97 kW	5.62 kW
COP T <sub>j</sub> = 12°C	4.94	3.86
Cdh T <sub>j</sub> = +12 °C	0.990	0.990
Pdh T <sub>j</sub> = T <sub>biv</sub>	5.83 kW	5.22 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.32	2.68
Pdh T <sub>j</sub> = TOL or Pdh T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.83 kW	5.22 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	4.32	2.68
Cdh T <sub>j</sub> = TOL or Pdh T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.993	0.993
WTOL	65 °C	65 °C
P <sub>off</sub>	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	1618 kWh	2014 kWh
<b>EN 14825   Average Climate</b>		
P <sub>designh</sub>	6.37 kW	
Backup Heater	0.00 kW	

**Model VITOCAL 222-G BWT-M 221.B06 SC**

Model name	VITOCAL 222-G BWT-M 221.B06 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 $\eta_{DHW}$	129 %
COP	3.12
Heating up time	2:10 h:min
Standby power input	35.0 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	303 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	129 %
COP	3.12
Heating up time	2:10 h:min
Standby power input	35.0 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	303 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	129 %
COP	3.12
Heating up time	2:10 h:min
Standby power input	35.0 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	303 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	
<b>EN 14511-2   Heating</b>		
Heat output	Low temperature	Medium temperature
5.83 kW	5.22 kW	
EI input	1.35 kW	1.95 kW
COP	4.32	2.68
<b>EN 12102-1   Average Climate</b>		
Sound power level indoor	Low temperature	Medium temperature
40 dB(A)	40 dB(A)	
<b>EN 14825   Average Climate</b>		
	Low temperature	Medium temperature
ηs	177 %	128 %
Prated	6.37 kW	5.75 kW
SCOP	4.62	3.40
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.84 kW	5.28 kW
COP Tj = -7°C	4.41	2.89
Cdh Tj = -7 °C	0.990	0.992
Pdh Tj = +2°C	5.92 kW	5.48 kW
COP Tj = +2°C	4.66	3.41
Cdh Tj = +2 °C	0.989	0.991
Pdh Tj = +7°C	5.95 kW	5.57 kW
COP Tj = +7°C	4.86	3.74
Cdh Tj = +7 °C	0.989	0.991
Pdh Tj = 12°C	6.03 kW	5.69 kW
COP Tj = 12°C	5.10	4.13
Cdh Tj = +12 °C	0.989	0.990
Pdh Tj = Tbiv	5.84 kW	5.28 kW
COP Tj = Tbiv	4.41	2.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.83 kW	5.22 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.32	2.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.993
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	0.54 kW	0.53 kW
Annual energy consumption Qhe	2848 kWh	3497 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
$\eta_s$	169 %	127 %
P <sub>rated</sub>	9.15 kW	8.41 kW
SCOP	4.42	3.39
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-22 °C	-22 °C
P <sub>dh Tj = -7°C</sub>	5.95 kW	5.49 kW
COP T <sub>j</sub> = -7°C	4.87	3.49
C <sub>dh Tj = -7 °C</sub>	0.989	0.991
P <sub>dh Tj = +2°C</sub>	6.00 kW	5.59 kW
COP T <sub>j</sub> = +2°C	5.02	3.81
C <sub>dh Tj = +2 °C</sub>	0.989	0.990
P <sub>dh Tj = +7°C</sub>	6.03 kW	5.68 kW
COP T <sub>j</sub> = +7°C	5.14	4.10
C <sub>dh Tj = +7 °C</sub>	0.989	0.990
P <sub>dh Tj = 12°C</sub>	6.04 kW	5.75 kW
COP T <sub>j</sub> = 12°C	5.14	4.33
C <sub>dh Tj = +12 °C</sub>	0.989	0.990
P <sub>dh Tj = T<sub>biv</sub></sub>	5.95 kW	5.49 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.87	3.49
P <sub>dh Tj = TOL or P<sub>dh Tj = T<sub>designh</sub></sub> if TOL &lt; T<sub>designh</sub></sub>	5.83 kW	5.22 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	4.32	2.68
C <sub>dh Tj = TOL or P<sub>dh Tj = T<sub>designh</sub></sub> if TOL &lt; T<sub>designh</sub></sub>	0.990	0.993
WTOL	65 °C	65 °C
P <sub>off</sub>	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	3.32 kW	3.19 kW
Annual energy consumption Qhe	5103 kWh	6123 kWh
P <sub>dh Tj = -15°C (if TOL</sub>	5.82	5.23
COP T <sub>j</sub> = -15°C (if TOL	4.85	2.91
C <sub>dh Tj = -15 °C</sub>	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
<b>EN 14825   Warmer Climate</b>		
	Low temperature	Medium temperature
ηs	177 %	127 %
P <sub>rated</sub>	5.59 kW	5.22 kW
SCOP	4.62	3.37
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
Pdh T <sub>j</sub> = +2°C	5.83 kW	5.22 kW
COP T <sub>j</sub> = +2°C	4.32	2.68
Cdh T <sub>j</sub> = +2 °C	0.993	0.993
Pdh T <sub>j</sub> = +7°C	5.89 kW	5.37 kW
COP T <sub>j</sub> = +7°C	4.56	3.13
Cdh T <sub>j</sub> = +7 °C	0.992	0.992
Pdh T <sub>j</sub> = 12°C	5.97 kW	5.62 kW
COP T <sub>j</sub> = 12°C	4.94	3.86
Cdh T <sub>j</sub> = +12 °C	0.990	0.990
Pdh T <sub>j</sub> = T <sub>biv</sub>	5.83 kW	5.22 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.32	2.68
Pdh T <sub>j</sub> = TOL or Pdh T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.83 kW	5.22 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	4.32	2.68
Cdh T <sub>j</sub> = TOL or Pdh T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.993	0.993
WTOL	65 °C	65 °C
P <sub>off</sub>	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	1618 kWh	2014 kWh
<b>EN 14825   Average Climate</b>		
P <sub>designh</sub>	6.37 kW	
Backup Heater	0.00 kW	