Subtype Vitocal 2xx-G M B10

Certificate Holder	Viessmann Climate Solutions SE
Address	Viessmannstr. 1
ZIP	35107
City	Allendorf/Eder
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Vitocal 2xx-G M B10
Registration number	011-1W0290
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	
Model name	VITOCAL 200-G BWC-M 201.B10
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	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 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	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 Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	10.35 kW	9.79 kW
COP Tj = +2°C	5.08	3.75
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	10.38 kW	9.96 kW
COP Tj = +7°C	5.34	4.19
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	10.46 kW	10.12 kW
COP Tj = 12°C	5.63	4.65
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	10.29 kW	9.53 kW
COP Tj = Tbiv	4.80	3.18

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.25 kW	9.43 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.73	3.01
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
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	1.45 kW	1.40 kW
Annual energy consumption Qhe	4781 kWh	5948 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	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 Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	10.37 kW	10.03 kW
COP Tj = +2°C	5.82	4.28
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	10.49 kW	10.16 kW
COP Tj = +7°C	6.09	4.71
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	10.46 kW	10.26 kW
COP Tj = 12°C	6.09	5.07
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	10.37 kW	9.80 kW
COP Tj = Tbiv	5.54	3.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.25 kW	9.48 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.08	3.11
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99

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	6.71 kW	6.93 kW
Annual energy consumption Qhe	8407 kWh	10514 kWh
Pdh Tj = -15°C (if TOL	10.32	9.68
COP Tj = -15°C (if TOL	5.43	3.47
Cdh Tj = -15 °C	0.99	0.99

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	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 Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	10.26 kW	9.65 kW
COP Tj = +7°C	4.99	3.45
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	10.39 kW	10.00 kW
COP Tj = 12°C	5.43	4.27
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	10.22 kW	9.45 kW
COP Tj = Tbiv	4.74	3.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.22 kW	9.45 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.74	3.02
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	2682 kWh	3369 kWh

Model VITOCAL 222-G BWT-M 221.B10	
Model name	VITOCAL 222-G BWT-M 221.B10
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Brine+Water
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	130 %
COP	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 l
EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	130 %
COP	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 l
EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	130 %
COP	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 l

Model VITOCAL 222-G BWT-M 221.B10 SC	
Model name	VITOCAL 222-G BWT-M 221.B10 SC
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Brine+Water
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	130 %
COP	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 l
EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	130 %
COP	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 l
EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	130 %
COP	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 l