

## Subtype Vitocal 3xx-G C06

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 3xx-G C06
Registration number	011-1W0291
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	2 kg
Certification Date	11.07.2019

## Model VITOCAL 300-G BWC 301.C06

Model name	VITOCAL 300-G BWC 301.C06
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	3x400V 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	40 dB(A)	40 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	204 %	141 %
Prated	6.00 kW	6.00 kW
SCOP	5.29	3.72
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.33 kW	5.48 kW
COP Tj = -7°C	4.63	3.06
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.27 kW	3.24 kW
COP Tj = +2°C	5.33	3.77
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.17 kW	2.17 kW
COP Tj = +7°C	5.59	4.06
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	1.77 kW	1.73 kW
COP Tj = 12°C	5.96	4.12
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	5.90 kW	6.25 kW
COP Tj = Tbiv	4.48	2.87

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.90 kW	6.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.48	2.87
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	0.10 kW	0.00 kW
Annual energy consumption Qhe	2331 kWh	3329 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	205 %	148 %
Prated	6.00 kW	6.00 kW
SCOP	5.32	3.89
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.66 kW	3.71 kW
COP Tj = -7°C	5.42	3.62
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	3.10 kW	2.24 kW
COP Tj = +2°C	5.33	4.01
Cdh Tj = +2 °C	0.96	0.99
Pdh Tj = +7°C	2.21 kW	1.70 kW
COP Tj = +7°C	5.93	4.94
Cdh Tj = +7 °C	0.95	0.99
Pdh Tj = 12°C	1.76 kW	1.72 kW
COP Tj = 12°C	5.95	5.20
Cdh Tj = +12 °C	0.95	0.99
Pdh Tj = Tbiv	6.08 kW	5.99 kW
COP Tj = Tbiv	4.46	2.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.08 kW	5.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.46	2.87
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 Q <sub>he</sub>	2779 kWh	3801 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL	4.92	4.92
COP T <sub>j</sub> = -15°C (if TOL	4.91	3.22
C <sub>dh</sub> T <sub>j</sub> = -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
η <sub>s</sub>	205 %	140 %
Prated	6.00 kW	6.00 kW
SCOP	5.19	3.71
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.67 kW	6.22 kW
COP T <sub>j</sub> = +2°C	4.51	2.87
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.99	0.99
P <sub>dh</sub> T <sub>j</sub> = +7°C	3.99 kW	3.86 kW
COP T <sub>j</sub> = +7°C	5.16	3.43
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.98	0.99
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.77 kW	1.78 kW
COP T <sub>j</sub> = 12°C	5.32	4.10
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.96	0.97
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.67 kW	6.22 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.51	2.87
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.67 kW	6.22 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	4.51	2.87
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	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	0.33 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1544 kWh	2163 kWh

## Model VITOCAL 300-G BWC 301.C06 SC

Model name	VITOCAL 300-G BWC 301.C06 SC
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	3x400V 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
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	Low temperature	Medium temperature
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.10 kW	0.00 kW
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	2779 kWh	3801 kWh
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Sound power level indoor	40 dB(A)	40 dB(A)

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Prated	6.00 kW	6.00 kW
SCOP	5.19	3.71
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
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COP T <sub>j</sub> = T <sub>biv</sub>	4.51	2.87
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WTOL	65 °C	65 °C
Poff	0 W	0 W
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PSB	12 W	12 W
PCK	0 W	0 W



Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.33 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1544 kWh	2163 kWh

## Model VITOCAL 333-G BWT 331.C06

Model name	VITOCAL 333-G BWT 331.C06
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	3x400V 50Hz
Off-peak product	Yes

## Brine/Water

### EN 16147 | Average Climate

Declared load profile	XL
Efficiency $\eta_{DHW}$	127 %
COP	3.05
Heating up time	1:33 h:min
Standby power input	51.0 W
Reference hot water temperature	54.9 °C
Mixed water at 40°C	315 l

### EN 16147 | Colder Climate

Declared load profile	XL
Efficiency $\eta_{DHW}$	127 %
COP	3.05
Heating up time	1:33 h:min
Standby power input	51.0 W
Reference hot water temperature	54.9 °C
Mixed water at 40°C	315 l

### EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency $\eta_{DHW}$	127 %
COP	3.05
Heating up time	1:33 h:min
Standby power input	51.0 W
Reference hot water temperature	54.9 °C
Mixed water at 40°C	315 l

## Model VITOCAL 333-G BWT 331.C06 SC

Model name	VITOCAL 333-G BWT 331.C06 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	3x400V 50Hz
Off-peak product	Yes

### Brine/Water

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