Subtype Vitocal 3xx-G C16

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 3xx-G C16
Registration number	011-1W0212
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	3.25 kg
Certification Date	18.08.2020

Model VITOCAL 300-G BWC 301.C16	
Model name	VITOCAL 300-G BWC 301.C16
Application	Heating (medium 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 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	7.51 kW	6.78 kW
El input	1.51 kW	2.83 kW
COP	5.00	2.83

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
ηs	217 %	159 %
Prated	13.09 kW	15.29 kW
SCOP	5.63	4.17
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.43 kW	14.21 kW
COP Tj = -7°C	4.81	3.21
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.24 kW	8.74 kW
COP Tj = +2°C	5.68	4.14
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.88 kW	5.75 kW

COP Tj = +7°C	6.06	4.72
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.85 kW	3.80 kW
COP Tj = 12°C	6.00	5.24
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	13.09 kW	15.29 kW
COP Tj = Tbiv	4.56	2.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.09 kW	15.29 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.56	2.97
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	15 W	15 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0.71 kW
Annual energy consumption Qhe	4763 kWh	7914 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	224 %	162 %
Prated	14.15 kW	15.28 kW
SCOP	6.79	4.25
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.57 kW	9.88 kW
COP Tj = -7°C	5.62	3.91
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	5.24 kW	6.08 kW
COP Tj = +2°C	6.13	4.64
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.79 kW	4.02 kW
COP Tj = +7°C	6.00	4.91
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.82 kW	3.81 kW
COP Tj = 12°C	5.83	5.32
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	14.15 kW	15.28 kW

COP Tj = Tbiv	4.47	2.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.15 kW	15.28 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.47	2.96
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	15 W	15 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0.72 kW
Annual energy consumption Qhe	5953 kWh	9187 kWh
Pdh Tj = -15°C (if TOL	11.55	12.76
COP Tj = -15°C (if TOL	5.01	3.40
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	215 %	155 %
Prated	14.00 kW	15.30 kW
SCOP	5.59	4.08
Tbiv	-10 °C	-10 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	14.00 kW	15.30 kW
COP Tj = +2°C	4.48	2.97
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	9.03 kW	10.43 kW
COP Tj = +7°C	5.42	3.72
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.12 kW	4.68 kW
COP Tj = 12°C	5.96	4.75
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	14.00 kW	15.30 kW
COP Tj = Tbiv	4.48	2.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.00 kW	15.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.48	2.97

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	15 W	15 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0.70 kW
Annual energy consumption Qhe	3341 kWh	5183 kWh

EN 14825 | Average Climate	
Pdesignh	13.00 kW
Backup Heater	0.00 kW

Model VITOCAL 300-G BWC 301.C16 SC	
Model name	VITOCAL 300-G BWC 301.C16 SC
Application	Heating (medium 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 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	7.51 kW	6.78 kW
El input	1.51 kW	2.83 kW
COP	5.00	2.83

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EN 14825 | Average Climate	
Pdesignh	13.00 kW
Backup Heater	0.00 kW