

Summary of	Vitocal 3xx-G C16	Reg. No.	011-1W0212
Certificate Holder	-		<del>-</del>
Name	Viessmann Wärmepumpen GmbH		
Address	Viessmannstr. 1	Zip	35107
City	Allendorf/Eder	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Name of testing laboratory	Heat Pump Test Center WPZ		
Subtype title	Vitocal 3xx-G C16		
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

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	7.51 kW	6.78 kW
El input	1.51 kW	2.83 kW
СОР	5.00	2.83
Indoor water flow rate	1.30 m³/h	1.10 m³/h

EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

## Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)

EN 14825			
		Low temperature	Medium temperature
Pdesignh	13.00 kW		
$\eta_{s}$	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	0.99	0.99	
Pdh Tj = $+2$ °C	7.24 kW	8.74 kW	
COP Tj = +2°C	5.68	4.14	
Cdh	0.99	0.99	
Pdh Tj = +7°C	4.88 kW	5.75 kW	
COP Tj = +7°C	6.06	4.72	
Cdh	0.99	0.99	





Pdh Tj = 12°C	3.85 kW	3.80 kW
COP Tj = 12°C	6.00	5.24
Cdh	0.99	0.99
Pdh Tj = Tbiv	13.09 kW	15.29 kW
COP Tj = Tbiv	4.56	2.97
Pdh Tj = TOL	13.09 kW	15.29 kW
COP Tj = TOL	4.56	2.97
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	o w	0 W
PTO	15 W	15 W
PSB	o w	0 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0 kW	0.71 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	4763 kWh	7914 kWh

### Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)



#### EN 14825

	Low temperature	Medium temperature
$\eta_{s}$	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	0.99	0.99
Pdh Tj = +7°C	9.03 kW	10.43 kW
COP Tj = +7°C	5.42	3.72
Cdh	0.99	0.99
Pdh Tj = 12°C	4.12 kW	4.68 kW
COP Tj = 12°C	5.96	4.75
Cdh	0.99	0.99
Pdh Tj = Tbiv	14.00 kW	15.30 kW
COP Tj = Tbiv	4.48	2.97
Pdh Tj = TOL	14.00 kW	15.30 kW
COP Tj = TOL	4.48	2.97
Cdh	0.99	0.99





WTOL	65 °C	65 °C
Poff	o w	o w
РТО	15 W	15 W
PSB	0 W	o w
PCK	o w	o w
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0 kW	0.70 kW
Annual energy consumption Qhe	3341 kWh	5183 kWh

## Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	224 %	162 %
Prated	14.15 kW	15.28 kW
SCOP	6.79	4.25
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C





		Title database on 17 Dec 2020
Pdh Tj = -7°C	8.57 kW	9.88 kW
$COPTj = -7^{\circ}C$	5.62	3.91
Cdh	0.99	0.99
Pdh Tj = +2°C	5.24 kW	6.08 kW
COP Tj = +2°C	6.13	4.64
Cdh	0.99	0.99
Pdh Tj = $+7$ °C	3.79 kW	4.02 kW
$COPTj = +7^{\circ}C$	6.00	4.91
Cdh	0.99	0.99
Pdh Tj = 12°C	3.82 kW	3.81 kW
COP Tj = 12°C	5.83	5.32
Cdh	0.99	0.99
Pdh Tj = Tbiv	14.15 kW	15.28 kW
COP Tj = Tbiv	4.47	2.96
Pdh Tj = TOL	14.15 kW	15.28 kW
COP Tj = TOL	4.47	2.96
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	o w	o w
РТО	15 W	15 W
PSB	o w	o w



PCK	o w	o w
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0 kW	0.72 kW
Annual energy consumption Qhe	5953 kWh	9187 kWh
Pdh Tj = -15°C (if TOL<-20°C)	11.55	12.76
COP Tj = -15°C (if TOL $<$ -20°C)	5.01	3.40
Cdh	0.99	0.99



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Power supply 3x400V 50Hz		

## Heating

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El input	1.51 kW	2.83 kW	
СОР	5.00	2.83	
Indoor water flow rate	1.30 m³/h	1.10 m³/h	

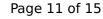
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

## Average Climate



EN 12102-1		
Low temperature Medium temperature		
Sound power level indoor	40 dB(A)	40 dB(A)

EN 14825			
		Low temperature	Medium temperature
Pdesignh	13.00 kW		
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Pdh Tj = TOL	13.09 kW	15.29 kW
COP Tj = TOL	4.56	2.97
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	0 W	o w
РТО	15 W	15 W
PSB	0 W	0 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0 kW	0.71 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	4763 kWh	7914 kWh

### Warmer Climate

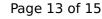
EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	40 dB(A)	40 dB(A)	



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#### EN 14825

LN 14025		
	Low temperature	Medium temperature
$\eta_{s}$	215 %	155 %
Prated	14.00 kW	15.30 kW
SCOP	5.59	4.08
Tbiv	-10 °C	-10 °C
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Pdh Tj = Tbiv	14.00 kW	15.30 kW
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Cdh	0.99	0.99



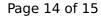


WTOL	65 °C	65 °C
Poff	o w	0 W
РТО	15 W	15 W
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PCK	o w	o w
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## Colder Climate

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

EN 14825				
	ı	Low temperature	Medium temperature	
$\eta_{s}$	2	224 %	162 %	
Prated	:	14.15 kW	15.28 kW	
SCOP	(	6.79	4.25	
Tbiv		-22 °C	-22 °C	
TOL	-	-22 °C	-22 °C	





		ARK database on 17 Dec 2020
Pdh Tj = -7°C	8.57 kW	9.88 kW
COP Tj = -7°C	5.62	3.91
Cdh	0.99	0.99
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Pdh Tj = TOL	14.15 kW	15.28 kW
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Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	o w	o w
РТО	15 W	15 W
PSB	o w	o w



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PCK	o w	o w
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0 kW	0.72 kW
Annual energy consumption Qhe	5953 kWh	9187 kWh
Pdh Tj = -15°C (if TOL<-20°C)	11.55	12.76
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