Login

Summary of	Vitocal 3xx-G C12	Reg. No.	011-1W0292
Certificate Holder			
Name	Viessmann Wärmepumpen GmbH		
Address	Viessmannstr. 1	Zip	35107
City	Allendorf/Eder	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	Vitocal 3xx-G C12		
Heat Pump Type	Brine/Water		
Refrigerant	R410A		
Mass of Refrigerant	2.3 kg		
Certification Date	11.07.2019		

Model: VITOCAL 300-G BWC 301.C12

Configure model	
Model name	VITOCAL 300-G BWC 301.C12
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.31 kW	4.74 kW
El input	1.11 kW	1.68 kW
COP	4.72	2.82

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

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	201 %	154 %
Prated	12.00 kW	12.00 kW
SCOP	5.09	4.06
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.48 kW	10.83 kW
COP Tj = +2°C	4.08	2.91
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	10.97 kW	7.97 kW
COP Tj = +7°C	4.51	3.53
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.74 kW	3.50 kW
COP Tj = 12°C	5.89	4.80
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	11.48 kW	10.83 kW

COP Tj = Tbiv	4.08	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.48 kW	10.83 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.08	2.91
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	0.52 kW	0.00 kW
Annual energy consumption Qhe	3150 kWh	3951 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	211 %	157 %

Prated	12.00 kW	12.00 kW
SCOP	5.48	4.12
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.70 kW	7.62 kW
COP Tj = -7°C	5.18	3.71
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.56 kW	4.52 kW
COP Tj = +2°C	6.03	4.47
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	3.02 kW	3.02 kW
COP Tj = +7°C	6.17	4.90
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	2.43 kW	2.40 kW
COP Tj = 12°C	5.78	5.16
Cdh Tj = +12 °C	0.95	0.97
Pdh Tj = Tbiv	11.45 kW	10.86 kW
COP Tj = Tbiv	4.09	2.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.45 kW	10.86 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.09	2.92
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	0.55 kW	0.14 kW
Annual energy consumption Qhe	5324 kWh	7182 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.70	9.35
COP Tj = -15°C (if TOL<-20°C)	4.60	3.29
Cdh Tj = -15 °C	0.99	0.99

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825			
		Low temperature	**Medium temperature**
Pdesignh	12.00 kW		
η_s	205 %	151 %	

Prated	12.00 kW	12.00 kW
SCOP	5.32	3.97
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.07 kW	10.86 kW
COP Tj = -7°C	4.26	3.05
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.75 kW	6.66 kW
COP Tj = +2°C	5.28	3.91
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.56 kW	4.41 kW
COP Tj = +7°C	6.03	4.57
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.46 kW	2.37 kW
COP Tj = 12°C	6.03	4.93
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	11.49 kW	10.86 kW
COP Tj = Tbiv	4.09	2.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.49 kW	10.86 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.09	2.92

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	0.51 kW	1.14 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	4661 kWh	6242 kWh

Model: VITOCAL 300-G BWC 301.C12 SC

Configure model	
Model name	VITOCAL 300-G BWC 301.C12 SC
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.31 kW	4.74 kW
El input	1.11 kW	1.68 kW
COP	4.72	2.82

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

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	201 %	154 %
Prated	12.00 kW	12.00 kW
SCOP	5.09	4.06
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.48 kW	10.83 kW
COP Tj = +2°C	4.08	2.91
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	10.97 kW	7.97 kW
COP Tj = +7°C	4.51	3.53
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.74 kW	3.50 kW
COP Tj = 12°C	5.89	4.80
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	11.48 kW	10.83 kW

COP Tj = Tbiv	4.08	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.48 kW	10.83 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.08	2.91
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	0.52 kW	0.00 kW
Annual energy consumption Qhe	3150 kWh	3951 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	211 %	157 %

Prated	12.00 kW	12.00 kW
SCOP	5.48	4.12
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.70 kW	7.62 kW
COP Tj = -7°C	5.18	3.71
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.56 kW	4.52 kW
COP Tj = +2°C	6.03	4.47
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	3.02 kW	3.02 kW
COP Tj = +7°C	6.17	4.90
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	2.43 kW	2.40 kW
COP Tj = 12°C	5.78	5.16
Cdh Tj = +12 °C	0.95	0.97
Pdh Tj = Tbiv	11.45 kW	10.86 kW
COP Tj = Tbiv	4.09	2.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.45 kW	10.86 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.09	2.92
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	0.55 kW	0.14 kW
Annual energy consumption Qhe	5324 kWh	7182 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.70	9.35
COP Tj = -15°C (if TOL<-20°C)	4.60	3.29
Cdh Tj = -15 °C	0.99	0.99

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825			
		Low temperature	**Medium temperature**
Pdesignh	12.00 kW		
η_s	205 %	151 %	

Prated	12.00 kW	12.00 kW
SCOP	5.32	3.97
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.07 kW	10.86 kW
COP Tj = -7°C	4.26	3.05
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.75 kW	6.66 kW
COP Tj = +2°C	5.28	3.91
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.56 kW	4.41 kW
COP Tj = +7°C	6.03	4.57
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.46 kW	2.37 kW
COP Tj = 12°C	6.03	4.93
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	11.49 kW	10.86 kW
COP Tj = Tbiv	4.09	2.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.49 kW	10.86 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.09	2.92

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	0.51 kW	1.14 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	4661 kWh	6242 kWh

Model: VITOCAL 333-G BWT 331.C12

Configure model	
Model name	VITOCAL 333-G BWT 331.C12
Application	Heating + DHW + low temp
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz
Off-peak product	Yes

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.31 kW	4.74 kW
El input	1.11 kW	1.68 kW
COP	4.72	2.82

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

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	201 %	154 %
Prated	12.00 kW	12.00 kW
SCOP	5.09	4.06
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.48 kW	10.83 kW
COP Tj = +2°C	4.08	2.91
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	10.97 kW	7.97 kW
COP Tj = +7°C	4.51	3.53
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.74 kW	3.50 kW
COP Tj = 12°C	5.89	4.80
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	11.48 kW	10.83 kW

COP Tj = Tbiv	4.08	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.48 kW	10.83 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.08	2.91
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	0.52 kW	0.00 kW
Annual energy consumption Qhe	3150 kWh	3951 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	211 %	157 %

Prated	12.00 kW	12.00 kW
SCOP	5.48	4.12
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.70 kW	7.62 kW
COP Tj = -7°C	5.18	3.71
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.56 kW	4.52 kW
COP Tj = +2°C	6.03	4.47
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	3.02 kW	3.02 kW
COP Tj = +7°C	6.17	4.90
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	2.43 kW	2.40 kW
COP Tj = 12°C	5.78	5.16
Cdh Tj = +12 °C	0.95	0.97
Pdh Tj = Tbiv	11.45 kW	10.86 kW
COP Tj = Tbiv	4.09	2.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.45 kW	10.86 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.09	2.92
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	0.55 kW	0.14 kW
Annual energy consumption Qhe	5324 kWh	7182 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.70	9.35
COP Tj = -15°C (if TOL<-20°C)	4.60	3.29
Cdh Tj = -15 °C	0.99	0.99

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825			
		Low temperature	**Medium temperature**
Pdesignh	12.00 kW		
η_s	205 %	151 %	

Prated	12.00 kW	12.00 kW
SCOP	5.32	3.97
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.07 kW	10.86 kW
COP Tj = -7°C	4.26	3.05
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.75 kW	6.66 kW
COP Tj = +2°C	5.28	3.91
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.56 kW	4.41 kW
COP Tj = +7°C	6.03	4.57
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.46 kW	2.37 kW
COP Tj = 12°C	6.03	4.93
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	11.49 kW	10.86 kW
COP Tj = Tbiv	4.09	2.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.49 kW	10.86 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.09	2.92

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	0.51 kW	1.14 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	4661 kWh	6242 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	131 %
COP	3.16
Heating up time	1:17 h:min
Standby power input	51.0 W
Reference hot water temperature	54.9 °C
Mixed water at 40°C	315 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	131 %
COP	3.16
Heating up time	1:17 h:min
Standby power input	51.0 W
Reference hot water temperature	54.9 °C
Mixed water at 40°C	315 l

Average Climate

EN 16147

Declared load profile	XL
Efficiency ηDHW	131 %
COP	3.16
Heating up time	1:17 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.C12 SC

Configure model	
Model name	VITOCAL 333-G BWT 331.C12 SC
Application	Heating + DHW + low temp
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz
Off-peak product	Yes

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.31 kW	4.74 kW
El input	1.11 kW	1.68 kW
COP	4.72	2.82

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

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	201 %	154 %
Prated	12.00 kW	12.00 kW
SCOP	5.09	4.06
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.48 kW	10.83 kW
COP Tj = +2°C	4.08	2.91
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	10.97 kW	7.97 kW
COP Tj = +7°C	4.51	3.53
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.74 kW	3.50 kW
COP Tj = 12°C	5.89	4.80
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	11.48 kW	10.83 kW

COP Tj = Tbiv	4.08	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.48 kW	10.83 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.08	2.91
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	0.52 kW	0.00 kW
Annual energy consumption Qhe	3150 kWh	3951 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	211 %	157 %

Prated	12.00 kW	12.00 kW
SCOP	5.48	4.12
Tbiv	-22 °C	-22 °C
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Pdh Tj = -7°C	7.70 kW	7.62 kW
COP Tj = -7°C	5.18	3.71
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.56 kW	4.52 kW
COP Tj = +2°C	6.03	4.47
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	3.02 kW	3.02 kW
COP Tj = +7°C	6.17	4.90
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	2.43 kW	2.40 kW
COP Tj = 12°C	5.78	5.16
Cdh Tj = +12 °C	0.95	0.97
Pdh Tj = Tbiv	11.45 kW	10.86 kW
COP Tj = Tbiv	4.09	2.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.45 kW	10.86 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.09	2.92
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	0.55 kW	0.14 kW
Annual energy consumption Qhe	5324 kWh	7182 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.70	9.35
COP Tj = -15°C (if TOL<-20°C)	4.60	3.29
Cdh Tj = -15 °C	0.99	0.99

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825			
		Low temperature	**Medium temperature**
Pdesignh	12.00 kW		
η_s	205 %	151 %	

Prated	12.00 kW	12.00 kW
SCOP	5.32	3.97
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.07 kW	10.86 kW
COP Tj = -7°C	4.26	3.05
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.75 kW	6.66 kW
COP Tj = +2°C	5.28	3.91
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.56 kW	4.41 kW
COP Tj = +7°C	6.03	4.57
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.46 kW	2.37 kW
COP Tj = 12°C	6.03	4.93
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	11.49 kW	10.86 kW
COP Tj = Tbiv	4.09	2.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.49 kW	10.86 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.09	2.92

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	0.51 kW	1.14 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	4661 kWh	6242 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	131 %
COP	3.16
Heating up time	1:17 h:min
Standby power input	51.0 W
Reference hot water temperature	54.9 °C
Mixed water at 40°C	315 l

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	131 %
COP	3.16
Heating up time	1:17 h:min
Standby power input	51.0 W
Reference hot water temperature	54.9 °C
Mixed water at 40°C	315 l

Average Climate

EN 16147

Declared load profile	XL
Efficiency ηDHW	131 %
COP	3.16
Heating up time	1:17 h:min
Standby power input	51.0 W
Reference hot water temperature	54.9 °C
Mixed water at 40°C	315 l