Login

Summary of	Vitocal 2xx-G B08	Reg. No.	011-1W0286
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 2xx-G B08		
Heat Pump Type	Brine/Water		
Refrigerant	R410A		
Mass of Refrigerant	1.95 kg		
Certification Date	11.07.2019		

Disclaimer: this document is a summary of the certified performance.
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Model: VITOCAL 200-G BWC 201.B08

Configure model	
Model name	VITOCAL 200-G BWC 201.B08
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	7.54 kW	6.95 kW
El input	1.62 kW	2.51 kW
COP	4.64	2.74

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

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EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825

		Low temperature	Medium temperature
Pdesignh	7.57 kW		
η_s	201 %	143 %	
Prated	8.60 kW	7.95 kW	
SCOP	5.23	3.79	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	7.57 kW	6.99 kW	
COP Tj = -7°C	4.93	3.16	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	7.63 kW	7.19 kW	
COP Tj = +2°C	5.23	3.77	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	7.69 kW	7.31 kW	
COP Tj = +7°C	5.56	4.23	
Cdh Tj = +7 °C	0.99	0.99	

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Pdh Tj = 12°C	7.76 kW	7.45 kW
COP Tj = 12°C	5.91	4.80
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.57 kW	6.99 kW
COP Tj = Tbiv	4.93	3.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.88	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
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	1.05 kW	1.03 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	3398 kWh	4338 kWh

Warmer Climate

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EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	205 %	143 %
Prated	7.61 kW	6.92 kW
SCOP	5.32	3.76
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.55 kW	6.92 kW
COP Tj = +2°C	4.85	2.99
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	7.61 kW	7.09 kW
COP Tj = +7°C	5.15	3.45
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.73 kW	7.34 kW
COP Tj = 12°C	5.69	4.34
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.55 kW	6.92 kW

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COP Tj = Tbiv	4.85	2.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.85	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
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	1897 kWh	2449 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	195 %	142 %

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Prated	12.50 kW	11.63 kW
SCOP	5.08	3.80
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.65 kW	7.21 kW
COP Tj = -7°C	5.56	3.80
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.70 kW	7.36 kW
COP Tj = +2°C	5.90	4.33
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	7.76 kW	7.76 kW
COP Tj = +7°C	6.16	4.86
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.77 kW	7.58 kW
COP Tj = 12°C	6.24	5.25
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.65 kW	7.21 kW
COP Tj = Tbiv	5.56	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	6.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.11	3.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00

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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	4.93 kW	4.67 kW
Annual energy consumption Qhe	6143 kWh	7633 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.62	7.10
COP Tj = -15°C (if TOL<-20°C)	5.11	3.46
Cdh Tj = -15 °C	0.99	0.99

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Model: VITOCAL 200-G BWC 201.B08 SC

Configure model	
Model name	VITOCAL 200-G BWC 201.B08 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	n/a

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	7.54 kW	6.95 kW
El input	1.62 kW	2.51 kW
COP	4.64	2.74

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

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EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825

		Low temperature	Medium temperature
Pdesignh	7.57 kW		
η_s	201 %	143 %	
Prated	8.60 kW	7.95 kW	
SCOP	5.23	3.79	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	7.57 kW	6.99 kW	
COP Tj = -7°C	4.93	3.16	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	7.63 kW	7.19 kW	
COP Tj = +2°C	5.23	3.77	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	7.69 kW	7.31 kW	
COP Tj = +7°C	5.56	4.23	
Cdh Tj = +7 °C	0.99	0.99	

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Pdh Tj = 12°C	7.76 kW	7.45 kW
COP Tj = 12°C	5.91	4.80
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.57 kW	6.99 kW
COP Tj = Tbiv	4.93	3.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.88	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
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	1.05 kW	1.03 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	3398 kWh	4338 kWh

Warmer Climate

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EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	205 %	143 %
Prated	7.61 kW	6.92 kW
SCOP	5.32	3.76
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.55 kW	6.92 kW
COP Tj = +2°C	4.85	2.99
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	7.61 kW	7.09 kW
COP Tj = +7°C	5.15	3.45
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.73 kW	7.34 kW
COP Tj = 12°C	5.69	4.34
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.55 kW	6.92 kW

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COP Tj = Tbiv	4.85	2.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.85	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
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	1897 kWh	2449 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	195 %	142 %

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Prated	12.50 kW	11.63 kW
SCOP	5.08	3.80
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.65 kW	7.21 kW
COP Tj = -7°C	5.56	3.80
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.70 kW	7.36 kW
COP Tj = +2°C	5.90	4.33
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	7.76 kW	7.76 kW
COP Tj = +7°C	6.16	4.86
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.77 kW	7.58 kW
COP Tj = 12°C	6.24	5.25
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.65 kW	7.21 kW
COP Tj = Tbiv	5.56	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	6.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.11	3.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00

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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	4.93 kW	4.67 kW
Annual energy consumption Qhe	6095 kWh	7633 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.62	7.10
COP Tj = -15°C (if TOL<-20°C)	5.11	3.46
Cdh Tj = -15 °C	0.99	0.99

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Model: VITOCAL 222-G BWT 221.B08

Configure model	
Model name	VITOCAL 222-G BWT 221.B08
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	7.54 kW	6.95 kW
El input	1.62 kW	2.51 kW
COP	4.64	2.74

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

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EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825

		Low temperature	Medium temperature
Pdesignh	7.57 kW		
η_s	201 %	143 %	
Prated	8.60 kW	7.95 kW	
SCOP	5.23	3.79	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	7.57 kW	6.99 kW	
COP Tj = -7°C	4.93	3.16	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	7.63 kW	7.19 kW	
COP Tj = +2°C	5.23	3.77	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	7.69 kW	7.31 kW	
COP Tj = +7°C	5.56	4.23	
Cdh Tj = +7 °C	0.99	0.99	

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Pdh Tj = 12°C	7.76 kW	7.45 kW
COP Tj = 12°C	5.91	4.80
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.57 kW	6.99 kW
COP Tj = Tbiv	4.93	3.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.88	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
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	1.05 kW	1.03 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	3398 kWh	4338 kWh

Warmer Climate

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EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	205 %	143 %
Prated	7.61 kW	6.92 kW
SCOP	5.32	3.76
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.55 kW	6.92 kW
COP Tj = +2°C	4.85	2.99
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	7.61 kW	7.09 kW
COP Tj = +7°C	5.15	3.45
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.73 kW	7.34 kW
COP Tj = 12°C	5.69	4.34
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.55 kW	6.92 kW

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COP Tj = Tbiv	4.85	2.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.85	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
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	1897 kWh	2449 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	195 %	142 %

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Prated	12.50 kW	11.63 kW
SCOP	5.08	3.80
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.65 kW	7.21 kW
COP Tj = -7°C	5.56	3.80
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.70 kW	7.36 kW
COP Tj = +2°C	5.90	4.33
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	7.76 kW	7.76 kW
COP Tj = +7°C	6.16	4.86
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.77 kW	7.58 kW
COP Tj = 12°C	6.24	5.25
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.65 kW	7.21 kW
COP Tj = Tbiv	5.56	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	6.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.11	3.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00

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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	4.93 kW	4.67 kW
Annual energy consumption Qhe	6095 kWh	7633 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.62	7.10
COP Tj = -15°C (if TOL<-20°C)	5.11	3.46
Cdh Tj = -15 °C	0.99	0.99

Domestic Hot Water (DHW)

Average Climate

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EN 16147	
Declared load profile	XL
Efficiency ηDHW	130 %
COP	3.14
Heating up time	1:47 h:min
Standby power input	63.0 W
Reference hot water temperature	54.1 °C
Mixed water at 40°C	293 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	130 %
COP	3.14
Heating up time	1:47 h:min
Standby power input	63.0 W
Reference hot water temperature	54.1 °C
Mixed water at 40°C	293 l

Colder Climate

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EN 16147	
Declared load profile	XL
Efficiency ηDHW	130 %
COP	3.14
Heating up time	1:47 h:min
Standby power input	63.0 W
Reference hot water temperature	54.1 °C
Mixed water at 40°C	293 l

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Model: VITOCAL 222-G BWT 221.B08 SC

Configure model	
Model name	VITOCAL 222-G BWT 221.B08 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	7.54 kW	6.95 kW
El input	1.62 kW	2.51 kW
COP	4.64	2.74

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

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The authoritative source of this information is the heat pump certificate as executed by the certification body and the related technical data.

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825

		Low temperature	Medium temperature
Pdesignh	7.57 kW		
η_s	201 %	143 %	
Prated	8.60 kW	7.95 kW	
SCOP	5.23	3.79	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	7.57 kW	6.99 kW	
COP Tj = -7°C	4.93	3.16	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	7.63 kW	7.19 kW	
COP Tj = +2°C	5.23	3.77	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	7.69 kW	7.31 kW	
COP Tj = +7°C	5.56	4.23	
Cdh Tj = +7 °C	0.99	0.99	

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Pdh Tj = 12°C	7.76 kW	7.45 kW
COP Tj = 12°C	5.91	4.80
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.57 kW	6.99 kW
COP Tj = Tbiv	4.93	3.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.88	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
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	1.05 kW	1.03 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	3398 kWh	4338 kWh

Warmer Climate

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EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	205 %	143 %
Prated	7.61 kW	6.92 kW
SCOP	5.32	3.76
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.55 kW	6.92 kW
COP Tj = +2°C	4.85	2.99
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	7.61 kW	7.09 kW
COP Tj = +7°C	5.15	3.45
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.73 kW	7.34 kW
COP Tj = 12°C	5.69	4.34
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.55 kW	6.92 kW

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COP Tj = Tbiv	4.85	2.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.85	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00
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	1897 kWh	2449 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	195 %	142 %

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Prated	12.50 kW	11.63 kW
SCOP	5.08	3.80
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.65 kW	7.21 kW
COP Tj = -7°C	5.56	3.80
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.70 kW	7.36 kW
COP Tj = +2°C	5.90	4.33
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	7.76 kW	7.76 kW
COP Tj = +7°C	6.16	4.86
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.77 kW	7.58 kW
COP Tj = 12°C	6.24	5.25
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.65 kW	7.21 kW
COP Tj = Tbiv	5.56	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.57 kW	6.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.11	3.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	1.00

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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	4.93 kW	4.67 kW
Annual energy consumption Qhe	6095 kWh	7633 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.62	7.10
COP Tj = -15°C (if TOL<-20°C)	5.11	3.46
Cdh Tj = -15 °C	0.99	0.99

Domestic Hot Water (DHW)

Average Climate

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EN 16147	
Declared load profile	XL
Efficiency ηDHW	130 %
COP	3.14
Heating up time	1:47 h:min
Standby power input	63.0 W
Reference hot water temperature	54.1 °C
Mixed water at 40°C	293 l

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	130 %
COP	3.14
Heating up time	1:47 h:min
Standby power input	63.0 W
Reference hot water temperature	54.1 °C
Mixed water at 40°C	293 l

Colder Climate

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EN 16147

Declared load profile	XL
Efficiency ηDHW	130 %
COP	3.14
Heating up time	1:47 h:min
Standby power input	63.0 W
Reference hot water temperature	54.1 °C
Mixed water at 40°C	293 l

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