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Summary of	Vitocal x5x-A z2	Reg. No.	011-1W0590
Certificate Holder			
Name	Viessmann Climate Solutions SE		
Address	Viessmannstr. 1	ZIP	35107
City	Allendorf/Eder	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	Vitocal x5x-A z2		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R290		
Mass of Refrigerant	1.2 kg		
Certification Date	30.03.2023		
Testing basis	HP KEYMARK certification scheme rules rev. 11		

Model: Vitocal 250-A AWO-M-E-AC 251.A04

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC 251.A04
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 250-A AWO-M-E-AC 251.A06

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC 251.A06
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 250-A AWO-M-E-AC 251.A08

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC 251.A08
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 250-A AWO-M-E-AC 251.A04 SP

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC 251.A04 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 250-A AWO-M-E-AC 251.A06 SP

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC 251.A06 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 250-A AWO-M-E-AC 251.A08 SP

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC 251.A08 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 250-A AWO-M-E-AC 251.A04 2C

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC 251.A04 2C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 250-A AWO-M-E-AC 251.A06 2C

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC 251.A06 2C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 250-A AWO-M-E-AC 251.A08 2C

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC 251.A08 2C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 250-A AWO-M-E-AC 251.A04 2C SP

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC 251.A04 2C SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 250-A AWO-M-E-AC 251.A06 2C SP

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC 251.A06 2C SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 250-A AWO-M-E-AC 251.A08 2C SP

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC 251.A08 2C SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 250-A AWO-M-E-AC-AF 251.A04

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC-AF 251.A04
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 250-A AWO-M-E-AC-AF 251.A06

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC-AF 251.A06
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 250-A AWO-M-E-AC-AF 251.A08

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC-AF 251.A08
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 250-A AWO-M-E-AC-AF 251.A04 SP

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC-AF 251.A04 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 250-A AWO-M-E-AC-AF 251.A06 SP

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC-AF 251.A06 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 250-A AWO-M-E-AC-AF 251.A08 SP

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC-AF 251.A08 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 250-A AWO-M-E-AC-AF 251.A04 2C

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC-AF 251.A04 2C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

This information was generated by the HP KEYMARK database on 30 Aug 2023

Model: Vitocal 250-A AWO-M-E-AC-AF 251.A06 2C

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC-AF 251.A06 2C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 250-A AWO-M-E-AC-AF 251.A08 2C

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC-AF 251.A08 2C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 250-A AWO-M-E-AC-AF 251.A04 2C SP

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC-AF 251.A04 2C SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 250-A AWO-M-E-AC-AF 251.A06 2C SP

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC-AF 251.A06 2C SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 250-A AWO-M-E-AC-AF 251.A08 2C SP

Configure model	
Model name	Vitocal 250-A AWO-M-E-AC-AF 251.A08 2C SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 252-A AWOT-M-E-AC 251.A04

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC 251.A04
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

This information was generated by the HP KEYMARK database on 30 Aug 2023

Model: Vitocal 252-A AWOT-M-E-AC 251.A06

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC 251.A06
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 252-A AWOT-M-E-AC 251.A08

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC 251.A08
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 252-A AWOT-M-E-AC 251.A04 SP

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC 251.A04 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 252-A AWOT-M-E-AC 251.A06 SP

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC 251.A06 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 252-A AWOT-M-E-AC 251.A08 SP

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC 251.A08 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 252-A AWOT-M-E-AC 251.A04 2C

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC 251.A04 2C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 252-A AWOT-M-E-AC 251.A06 2C

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC 251.A06 2C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 252-A AWOT-M-E-AC 251.A08 2C

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC 251.A08 2C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 252-A AWOT-M-E-AC 251.A04 2C SP

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC 251.A04 2C SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 252-A AWOT-M-E-AC 251.A06 2C SP

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC 251.A06 2C SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 252-A AWOT-M-E-AC 251.A08 2C SP

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC 251.A08 2C SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 252-A AWOT-M-E-AC-AF 251.A04

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC-AF 251.A04
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 252-A AWOT-M-E-AC-AF 251.A06

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC-AF 251.A06
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 252-A AWOT-M-E-AC-AF 251.A08

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC-AF 251.A08
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 252-A AWOT-M-E-AC-AF 251.A04 SP

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC-AF 251.A04 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 252-A AWOT-M-E-AC-AF 251.A06 SP

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC-AF 251.A06 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 252-A AWOT-M-E-AC-AF 251.A08 SP

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC-AF 251.A08 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 252-A AWOT-M-E-AC-AF 251.A04 2C

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC-AF 251.A04 2C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 252-A AWOT-M-E-AC-AF 251.A06 2C

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC-AF 251.A06 2C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

Model: Vitocal 252-A AWOT-M-E-AC-AF 251.A08 2C

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC-AF 251.A08 2C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 252-A AWOT-M-E-AC-AF 251.A04 2C SP

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC-AF 251.A04 2C SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 252-A AWOT-M-E-AC-AF 251.A06 2C SP

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC-AF 251.A06 2C SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

This information was generated by the HP KEYMARK database on 30 Aug 2023

Model: Vitocal 252-A AWOT-M-E-AC-AF 251.A08 2C SP

Configure model	
Model name	Vitocal 252-A AWOT-M-E-AC-AF 251.A08 2C SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 150-A AWO-M-E-AC 151.A04

Configure model	
Model name	Vitocal 150-A AWO-M-E-AC 151.A04
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.80 kW	1.20 kW
COP	5.00	2.97

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	216 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.47	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.70	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	573 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.62 kW	5.36 kW
η_s	148 %	122 %
Prated	5.62 kW	5.36 kW
SCOP	3.78	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.40	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.62 kW	5.36 kW
Annual energy consumption Qhe	3662 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	185 %	140 %
Prated	4.08 kW	3.77 kW
SCOP	4.69	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.70	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1796 kWh	2185 kWh

Model: Vitocal 150-A AWO-M-E-AC 151.A06

Configure model	
Model name	Vitocal 150-A AWO-M-E-AC 151.A06
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.98 kW	1.46 kW
COP	4.90	3.01

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.77 kW	2.38 kW
η_s	220 %	153 %
Prated	2.77 kW	2.38 kW
SCOP	5.58	3.89
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.10	2.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.31 kW
COP Tj = +7°C	5.30	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.70	5.60

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.10	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.10	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	663 kWh	817 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.51 kW	6.71 kW
η_s	149 %	119 %
Prated	6.51 kW	6.71 kW
SCOP	3.80	3.04
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.30	2.70
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.20
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.90
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.50 kW	4.40 kW

COP Tj = Tbiv	2.90	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.51 kW	6.71 kW
Annual energy consumption Qhe	4229 kWh	5435 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.46 kW	5.14 kW
η_s	180 %	141 %
Prated	5.46 kW	5.14 kW
SCOP	4.58	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.60 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.60	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.70
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.50
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.80 kW	4.60 kW
COP Tj = Tbiv	3.00	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2461 kWh	2947 kWh

Model: Vitocal 150-A AWO-M-E-AC 151.A08

Configure model	
Model name	Vitocal 150-A AWO-M-E-AC 151.A08
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.19 kW	1.71 kW
COP	4.70	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.66 kW
η_s	238 %	166 %
Prated	3.83 kW	3.66 kW
SCOP	6.02	4.22
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.70 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.60
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.80

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.70 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1159 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.45 kW
η_s	143 %	121 %
Prated	7.68 kW	7.45 kW
SCOP	3.66	3.11
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.60
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.20
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.10
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.45 kW
Annual energy consumption Qhe	5174 kWh	5903 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.20 kW
η_s	175 %	137 %
Prated	6.47 kW	6.20 kW
SCOP	4.44	3.51
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.10 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3648 kWh

Model: Vitocal 150-A AWO-M-E-AC 151.A04 SP

Configure model	
Model name	Vitocal 150-A AWO-M-E-AC 151.A04 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.80 kW	1.20 kW
COP	5.00	2.97

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	216 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.47	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.70	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	573 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.62 kW	5.36 kW
η_s	148 %	122 %
Prated	5.62 kW	5.36 kW
SCOP	3.78	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.40	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.62 kW	5.36 kW
Annual energy consumption Qhe	3662 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	185 %	140 %
Prated	4.08 kW	3.77 kW
SCOP	4.69	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.70	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1796 kWh	2185 kWh

Model: Vitocal 150-A AWO-M-E-AC 151.A06 SP

Configure model	
Model name	Vitocal 150-A AWO-M-E-AC 151.A06 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.98 kW	1.46 kW
COP	4.90	3.01

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.77 kW	2.38 kW
η_s	220 %	153 %
Prated	2.77 kW	2.38 kW
SCOP	5.58	3.89
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.10	2.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.31 kW
COP Tj = +7°C	5.30	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.70	5.60

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.10	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.10	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	663 kWh	817 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.51 kW	6.71 kW
η_s	149 %	119 %
Prated	6.51 kW	6.71 kW
SCOP	3.80	3.04
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.30	2.70
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.20
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.90
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.50 kW	4.40 kW

COP Tj = Tbiv	2.90	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.51 kW	6.71 kW
Annual energy consumption Qhe	4229 kWh	5435 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.46 kW	5.14 kW
η_s	180 %	141 %
Prated	5.46 kW	5.14 kW
SCOP	4.58	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.60 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.60	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.70
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.50
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.80 kW	4.60 kW
COP Tj = Tbiv	3.00	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2461 kWh	2947 kWh

Model: Vitocal 150-A AWO-M-E-AC 151.A08 SP

Configure model	
Model name	Vitocal 150-A AWO-M-E-AC 151.A08 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.19 kW	1.71 kW
COP	4.70	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.66 kW
η_s	238 %	166 %
Prated	3.83 kW	3.66 kW
SCOP	6.02	4.22
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.70 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.60
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.80

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.70 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1159 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.45 kW
η_s	143 %	121 %
Prated	7.68 kW	7.45 kW
SCOP	3.66	3.11
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.60
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.20
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.10
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.45 kW
Annual energy consumption Qhe	5174 kWh	5903 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.20 kW
η_s	175 %	137 %
Prated	6.47 kW	6.20 kW
SCOP	4.44	3.51
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.10 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3648 kWh

Model: Vitocal 150-A AWO-M-E-AC-AF 151.A04

Configure model	
Model name	Vitocal 150-A AWO-M-E-AC-AF 151.A04
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.80 kW	1.20 kW
COP	5.00	2.97

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	216 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.47	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.70	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	573 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.62 kW	5.36 kW
η_s	148 %	122 %
Prated	5.62 kW	5.36 kW
SCOP	3.78	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.40	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.62 kW	5.36 kW
Annual energy consumption Qhe	3662 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	185 %	140 %
Prated	4.08 kW	3.77 kW
SCOP	4.69	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.70	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1796 kWh	2185 kWh

Model: Vitocal 150-A AWO-M-E-AC-AF 151.A06

Configure model	
Model name	Vitocal 150-A AWO-M-E-AC-AF 151.A06
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.98 kW	1.46 kW
COP	4.90	3.01

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.77 kW	2.38 kW
η_s	220 %	153 %
Prated	2.77 kW	2.38 kW
SCOP	5.58	3.89
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.10	2.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.31 kW
COP Tj = +7°C	5.30	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.70	5.60

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.10	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.10	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	663 kWh	817 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.51 kW	6.71 kW
η_s	149 %	119 %
Prated	6.51 kW	6.71 kW
SCOP	3.80	3.04
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.30	2.70
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.20
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.90
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.50 kW	4.40 kW

COP Tj = Tbiv	2.90	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.51 kW	6.71 kW
Annual energy consumption Qhe	4229 kWh	5435 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.46 kW	5.14 kW
η_s	180 %	141 %
Prated	5.46 kW	5.14 kW
SCOP	4.58	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.60 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.60	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.70
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.50
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.80 kW	4.60 kW
COP Tj = Tbiv	3.00	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2461 kWh	2947 kWh

Model: Vitocal 150-A AWO-M-E-AC-AF 151.A08

Configure model	
Model name	Vitocal 150-A AWO-M-E-AC-AF 151.A08
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.19 kW	1.71 kW
COP	4.70	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.66 kW
η_s	238 %	166 %
Prated	3.83 kW	3.66 kW
SCOP	6.02	4.22
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.70 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.60
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.80

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.70 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1159 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.45 kW
η_s	143 %	121 %
Prated	7.68 kW	7.45 kW
SCOP	3.66	3.11
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.60
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.20
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.10
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.45 kW
Annual energy consumption Qhe	5174 kWh	5903 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.20 kW
η_s	175 %	137 %
Prated	6.47 kW	6.20 kW
SCOP	4.44	3.51
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.10 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3648 kWh

Model: Vitocal 150-A AWO-M-E-AC-AF 151.A04 SP

Configure model	
Model name	Vitocal 150-A AWO-M-E-AC-AF 151.A04 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.80 kW	1.20 kW
COP	5.00	2.97

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	216 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.47	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.70	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	573 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.62 kW	5.36 kW
η_s	148 %	122 %
Prated	5.62 kW	5.36 kW
SCOP	3.78	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.40	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.62 kW	5.36 kW
Annual energy consumption Qhe	3662 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	185 %	140 %
Prated	4.08 kW	3.77 kW
SCOP	4.69	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.70	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1796 kWh	2185 kWh

Model: Vitocal 150-A AWO-M-E-AC-AF 151.A06 SP

Configure model	
Model name	Vitocal 150-A AWO-M-E-AC-AF 151.A06 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.98 kW	1.46 kW
COP	4.90	3.01

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.77 kW	2.38 kW
η_s	220 %	153 %
Prated	2.77 kW	2.38 kW
SCOP	5.58	3.89
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.10	2.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.31 kW
COP Tj = +7°C	5.30	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.70	5.60

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.10	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.10	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	663 kWh	817 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.51 kW	6.71 kW
η_s	149 %	119 %
Prated	6.51 kW	6.71 kW
SCOP	3.80	3.04
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.30	2.70
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.20
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.90
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.50 kW	4.40 kW

COP Tj = Tbiv	2.90	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.51 kW	6.71 kW
Annual energy consumption Qhe	4229 kWh	5435 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.46 kW	5.14 kW
η_s	180 %	141 %
Prated	5.46 kW	5.14 kW
SCOP	4.58	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.60 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.60	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.70
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.50
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.80 kW	4.60 kW
COP Tj = Tbiv	3.00	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2461 kWh	2947 kWh

Model: Vitocal 150-A AWO-M-E-AC-AF 151.A08 SP

Configure model	
Model name	Vitocal 150-A AWO-M-E-AC-AF 151.A08 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.19 kW	1.71 kW
COP	4.70	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.66 kW
η_s	238 %	166 %
Prated	3.83 kW	3.66 kW
SCOP	6.02	4.22
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.70 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.60
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.80

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.70 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1159 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.45 kW
η_s	143 %	121 %
Prated	7.68 kW	7.45 kW
SCOP	3.66	3.11
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.60
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.20
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.10
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.45 kW
Annual energy consumption Qhe	5174 kWh	5903 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.20 kW
η_s	175 %	137 %
Prated	6.47 kW	6.20 kW
SCOP	4.44	3.51
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.10 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3648 kWh

Model: Vitocal 151-A AWOT-M-E-AC 151.A04

Configure model	
Model name	Vitocal 151-A AWOT-M-E-AC 151.A04
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.80 kW	1.20 kW
COP	5.00	2.97

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	216 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.47	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.70	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	573 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.62 kW	5.36 kW
η_s	148 %	122 %
Prated	5.62 kW	5.36 kW
SCOP	3.78	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.40	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.62 kW	5.36 kW
Annual energy consumption Qhe	3662 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	185 %	140 %
Prated	4.08 kW	3.77 kW
SCOP	4.69	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.70	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1796 kWh	2185 kWh

This information was generated by the HP KEYMARK database on 30 Aug 2023

Model: Vitocal 151-A AWOT-M-E-AC 151.A06

Configure model	
Model name	Vitocal 151-A AWOT-M-E-AC 151.A06
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.98 kW	1.46 kW
COP	4.90	3.01

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.77 kW	2.38 kW
η_s	220 %	153 %
Prated	2.77 kW	2.38 kW
SCOP	5.58	3.89
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.10	2.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.31 kW
COP Tj = +7°C	5.30	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.70	5.60

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.10	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.10	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	663 kWh	817 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.51 kW	6.71 kW
η_s	149 %	119 %
Prated	6.51 kW	6.71 kW
SCOP	3.80	3.04
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.30	2.70
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.20
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.90
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.50 kW	4.40 kW

COP Tj = Tbiv	2.90	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.51 kW	6.71 kW
Annual energy consumption Qhe	4229 kWh	5435 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.46 kW	5.14 kW
η_s	180 %	141 %
Prated	5.46 kW	5.14 kW
SCOP	4.58	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.60 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.60	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.70
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.50
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.80 kW	4.60 kW
COP Tj = Tbiv	3.00	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2461 kWh	2947 kWh

Model: Vitocal 151-A AWOT-M-E-AC 151.A08

Configure model	
Model name	Vitocal 151-A AWOT-M-E-AC 151.A08
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.19 kW	1.71 kW
COP	4.70	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.66 kW
η_s	238 %	166 %
Prated	3.83 kW	3.66 kW
SCOP	6.02	4.22
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.70 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.60
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.80

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.70 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1159 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.45 kW
η_s	143 %	121 %
Prated	7.68 kW	7.45 kW
SCOP	3.66	3.11
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.60
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.20
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.10
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.45 kW
Annual energy consumption Qhe	5174 kWh	5903 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.20 kW
η_s	175 %	137 %
Prated	6.47 kW	6.20 kW
SCOP	4.44	3.51
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.10 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3648 kWh

Model: Vitocal 151-A AWOT-M-E-AC 151.A04 SP

Configure model	
Model name	Vitocal 151-A AWOT-M-E-AC 151.A04 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.80 kW	1.20 kW
COP	5.00	2.97

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	216 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.47	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.70	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	573 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.62 kW	5.36 kW
η_s	148 %	122 %
Prated	5.62 kW	5.36 kW
SCOP	3.78	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.40	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.62 kW	5.36 kW
Annual energy consumption Qhe	3662 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	185 %	140 %
Prated	4.08 kW	3.77 kW
SCOP	4.69	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.70	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1796 kWh	2185 kWh

Model: Vitocal 151-A AWOT-M-E-AC 151.A06 SP

Configure model	
Model name	Vitocal 151-A AWOT-M-E-AC 151.A06 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.98 kW	1.46 kW
COP	4.90	3.01

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.77 kW	2.38 kW
η_s	220 %	153 %
Prated	2.77 kW	2.38 kW
SCOP	5.58	3.89
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.10	2.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.31 kW
COP Tj = +7°C	5.30	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.70	5.60

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.10	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.10	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	663 kWh	817 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.51 kW	6.71 kW
η_s	149 %	119 %
Prated	6.51 kW	6.71 kW
SCOP	3.80	3.04
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.30	2.70
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.20
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.90
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.50 kW	4.40 kW

COP Tj = Tbiv	2.90	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.51 kW	6.71 kW
Annual energy consumption Qhe	4229 kWh	5435 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.46 kW	5.14 kW
η_s	180 %	141 %
Prated	5.46 kW	5.14 kW
SCOP	4.58	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.60 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.60	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.70
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.50
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.80 kW	4.60 kW
COP Tj = Tbiv	3.00	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2461 kWh	2947 kWh

This information was generated by the HP KEYMARK database on 30 Aug 2023

Model: Vitocal 151-A AWOT-M-E-AC 151.A08 SP

Configure model	
Model name	Vitocal 151-A AWOT-M-E-AC 151.A08 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.19 kW	1.71 kW
COP	4.70	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.66 kW
η_s	238 %	166 %
Prated	3.83 kW	3.66 kW
SCOP	6.02	4.22
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.70 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.60
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.80

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.70 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1159 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.45 kW
η_s	143 %	121 %
Prated	7.68 kW	7.45 kW
SCOP	3.66	3.11
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.60
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.20
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.10
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.45 kW
Annual energy consumption Qhe	5174 kWh	5903 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.20 kW
η_s	175 %	137 %
Prated	6.47 kW	6.20 kW
SCOP	4.44	3.51
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.10 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3648 kWh

Model: Vitocal 151-A AWOT-M-E-AC-AF 151.A04

Configure model	
Model name	Vitocal 151-A AWOT-M-E-AC-AF 151.A04
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.80 kW	1.20 kW
COP	5.00	2.97

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	216 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.47	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.70	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	573 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.62 kW	5.36 kW
η_s	148 %	122 %
Prated	5.62 kW	5.36 kW
SCOP	3.78	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.40	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.62 kW	5.36 kW
Annual energy consumption Qhe	3662 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	185 %	140 %
Prated	4.08 kW	3.77 kW
SCOP	4.69	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.70	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1796 kWh	2185 kWh

Model: Vitocal 151-A AWOT-M-E-AC-AF 151.A06

Configure model	
Model name	Vitocal 151-A AWOT-M-E-AC-AF 151.A06
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.98 kW	1.46 kW
COP	4.90	3.01

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.77 kW	2.38 kW
η_s	220 %	153 %
Prated	2.77 kW	2.38 kW
SCOP	5.58	3.89
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.10	2.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.31 kW
COP Tj = +7°C	5.30	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.70	5.60

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.10	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.10	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	663 kWh	817 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.51 kW	6.71 kW
η_s	149 %	119 %
Prated	6.51 kW	6.71 kW
SCOP	3.80	3.04
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.30	2.70
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.20
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.90
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.50 kW	4.40 kW

COP Tj = Tbiv	2.90	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.51 kW	6.71 kW
Annual energy consumption Qhe	4229 kWh	5435 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.46 kW	5.14 kW
η_s	180 %	141 %
Prated	5.46 kW	5.14 kW
SCOP	4.58	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.60 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.60	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.70
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.50
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.80 kW	4.60 kW
COP Tj = Tbiv	3.00	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2461 kWh	2947 kWh

Model: Vitocal 151-A AWOT-M-E-AC-AF 151.A08

Configure model	
Model name	Vitocal 151-A AWOT-M-E-AC-AF 151.A08
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.19 kW	1.71 kW
COP	4.70	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.66 kW
η_s	238 %	166 %
Prated	3.83 kW	3.66 kW
SCOP	6.02	4.22
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.70 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.60
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.80

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.70 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1159 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.45 kW
η_s	143 %	121 %
Prated	7.68 kW	7.45 kW
SCOP	3.66	3.11
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.60
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.20
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.10
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.45 kW
Annual energy consumption Qhe	5174 kWh	5903 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.20 kW
η_s	175 %	137 %
Prated	6.47 kW	6.20 kW
SCOP	4.44	3.51
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.10 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3648 kWh

Model: Vitocal 151-A AWOT-M-E-AC-AF 151.A04 SP

Configure model	
Model name	Vitocal 151-A AWOT-M-E-AC-AF 151.A04 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.80 kW	1.20 kW
COP	5.00	2.97

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	216 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.47	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.70	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	573 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.62 kW	5.36 kW
η_s	148 %	122 %
Prated	5.62 kW	5.36 kW
SCOP	3.78	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.40	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.62 kW	5.36 kW
Annual energy consumption Qhe	3662 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	185 %	140 %
Prated	4.08 kW	3.77 kW
SCOP	4.69	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.70	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1796 kWh	2185 kWh

Model: Vitocal 151-A AWOT-M-E-AC-AF 151.A06 SP

Configure model	
Model name	Vitocal 151-A AWOT-M-E-AC-AF 151.A06 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.98 kW	1.46 kW
COP	4.90	3.01

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.77 kW	2.38 kW
η_s	220 %	153 %
Prated	2.77 kW	2.38 kW
SCOP	5.58	3.89
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.10	2.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.31 kW
COP Tj = +7°C	5.30	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.70	5.60

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.10	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.10	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	663 kWh	817 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.51 kW	6.71 kW
η_s	149 %	119 %
Prated	6.51 kW	6.71 kW
SCOP	3.80	3.04
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.30	2.70
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.00	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.30	5.20
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.90
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.50 kW	4.40 kW

COP Tj = Tbiv	2.90	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.30 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.51 kW	6.71 kW
Annual energy consumption Qhe	4229 kWh	5435 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.46 kW	5.14 kW
η_s	180 %	141 %
Prated	5.46 kW	5.14 kW
SCOP	4.58	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.60 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.60	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.70
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.50
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	4.80 kW	4.60 kW
COP Tj = Tbiv	3.00	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2461 kWh	2947 kWh

Model: Vitocal 151-A AWOT-M-E-AC-AF 151.A08 SP

Configure model	
Model name	Vitocal 151-A AWOT-M-E-AC-AF 151.A08 SP
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.19 kW	1.71 kW
COP	4.70	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.66 kW
η_s	238 %	166 %
Prated	3.83 kW	3.66 kW
SCOP	6.02	4.22
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.70 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.60
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.80

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.70 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 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	849 kWh	1159 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.45 kW
η_s	143 %	121 %
Prated	7.68 kW	7.45 kW
SCOP	3.66	3.11
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.60
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.20
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.10
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.68 kW	7.45 kW
Annual energy consumption Qhe	5174 kWh	5903 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.20 kW
η_s	175 %	137 %
Prated	6.47 kW	6.20 kW
SCOP	4.44	3.51
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.10 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3648 kWh

This information was generated by the HP KEYMARK database on 30 Aug 2023

Model: Vitocal 250-AH HAWO-M-AC 252.A04

Configure model	
Model name	Vitocal 250-AH HAWO-M-AC 252.A04
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

This information was generated by the HP KEYMARK database on 30 Aug 2023

Model: Vitocal 250-AH HAWO-M-AC 252.A06

Configure model	
Model name	Vitocal 250-AH HAWO-M-AC 252.A06
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

This information was generated by the HP KEYMARK database on 30 Aug 2023

Model: Vitocal 250-AH HAWO-M-AC 252.A08

Configure model	
Model name	Vitocal 250-AH HAWO-M-AC 252.A08
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh

Model: Vitocal 250-AH HAWO-M-AC-AF 252.A04

Configure model	
Model name	Vitocal 250-AH HAWO-M-AC-AF 252.A04
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.00 kW	3.56 kW
El input	0.78 kW	1.14 kW
COP	5.10	3.13

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.35 kW	1.90 kW
η_s	217 %	146 %
Prated	2.35 kW	1.90 kW
SCOP	5.49	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.40	3.50
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.50 kW	2.40 kW
COP Tj = 12°C	7.80	5.50

Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	2.30 kW	1.90 kW
COP Tj = Tbiv	4.20	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.30 kW	1.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	570 kWh	680 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	5.61 kW	5.36 kW
η_s	149 %	122 %
Prated	5.61 kW	5.36 kW
SCOP	3.81	3.13
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	3.40 kW	3.30 kW
COP Tj = -7°C	3.50	2.80
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.10 kW	2.00 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.40	5.10
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.80
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.70 kW	3.50 kW

COP Tj = Tbiv	3.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.60 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	5.61 kW	5.36 kW
Annual energy consumption Qhe	3627 kWh	4217 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	4.08 kW	3.77 kW
η_s	189 %	143 %
Prated	4.08 kW	3.77 kW
SCOP	4.72	3.56
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.60 kW	3.40 kW
COP Tj = -7°C	3.20	2.40
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	4.80	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.00	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.60	6.30
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	3.80 kW	3.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.20 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.55 kW	0.55 kW
Annual energy consumption Qhe	1786 kWh	2185 kWh

Model: Vitocal 250-AH HAWO-M-AC-AF 252.A06

Configure model	
Model name	Vitocal 250-AH HAWO-M-AC-AF 252.A06
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.80 kW	4.39 kW
El input	0.94 kW	1.38 kW
COP	5.10	3.17

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	2.75 kW	2.37 kW
η_s	226 %	154 %
Prated	2.75 kW	2.37 kW
SCOP	5.72	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.80 kW	2.40 kW
COP Tj = +2°C	4.20	2.50
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	5.50	3.50
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.70

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	2.80 kW	2.40 kW
COP Tj = Tbiv	4.20	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.20	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	643 kWh	804 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	6.47 kW	6.67 kW
η_s	152 %	120 %
Prated	6.47 kW	6.67 kW
SCOP	3.88	3.08
Tbiv	-10 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.10 kW	4.00 kW
COP Tj = -7°C	3.40	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.50 kW	2.40 kW
COP Tj = +2°C	5.10	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.60 kW
COP Tj = +7°C	6.50	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.50 kW
COP Tj = 12°C	7.80	7.00
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.40 kW	4.40 kW

COP Tj = Tbiv	3.00	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	6.47 kW	6.67 kW
Annual energy consumption Qhe	4108 kWh	5330 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	5.41 kW	5.11 kW
η_s	183 %	141 %
Prated	5.41 kW	5.11 kW
SCOP	4.71	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.50 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.80 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.30 kW	2.40 kW
COP Tj = 12°C	7.80	6.60
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	4.80 kW	4.50 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.40 kW	4.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.05 kW	1.04 kW
Annual energy consumption Qhe	2373 kWh	2890 kWh

This information was generated by the HP KEYMARK database on 30 Aug 2023

Model: Vitocal 250-AH HAWO-M-AC-AF 252.A08

Configure model	
Model name	Vitocal 250-AH HAWO-M-AC-AF 252.A08
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.60 kW	5.36 kW
El input	1.14 kW	1.71 kW
COP	4.90	3.14

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	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
Pdesignh	3.83 kW	3.65 kW
η_s	238 %	167 %
Prated	3.83 kW	3.65 kW
SCOP	6.02	4.26
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.80 kW	3.60 kW
COP Tj = +2°C	3.80	2.70
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.32 kW
COP Tj = +7°C	5.60	3.70
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.40 kW	2.40 kW
COP Tj = 12°C	7.90	5.90

Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	3.80 kW	3.60 kW
COP Tj = Tbiv	3.80	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.80 kW	3.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.80	2.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	849 kWh	1143 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825

	Low temperature	**Medium temperature**
Pdesignh	7.68 kW	7.41 kW
η_s	143 %	123 %
Prated	7.68 kW	7.41 kW
SCOP	3.66	3.14
Tbiv	-9 °C	-9 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.70 kW	4.50 kW
COP Tj = -7°C	3.20	2.70
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	2.90 kW	2.90 kW
COP Tj = +2°C	4.70	4.00
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	3.10 kW	2.60 kW
COP Tj = +7°C	6.40	5.30
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.90 kW	2.50 kW
COP Tj = 12°C	7.80	7.20
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.10 kW	4.90 kW

COP Tj = Tbiv	3.00	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.60 kW	3.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	7.68 kW	7.41 kW
Annual energy consumption Qhe	5174 kWh	5819 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	49 dB(A)	49 dB(A)

EN 14825		
	Low temperature	**Medium temperature**

Pdesignh	6.47 kW	6.17 kW
η_s	176 %	140 %
Prated	6.47 kW	6.17 kW
SCOP	4.44	3.55
Tbiv	-6 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	5.00 kW
COP Tj = -7°C	3.00	2.30
Cdh Tj = -7 °C	0.900	1.000
Pdh Tj = +2°C	3.50 kW	3.50 kW
COP Tj = +2°C	4.20	3.40
Cdh Tj = +2 °C	0.900	1.000
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	6.20	4.80
Cdh Tj = +7 °C	0.900	1.000
Pdh Tj = 12°C	2.20 kW	2.50 kW
COP Tj = 12°C	7.60	6.70
Cdh Tj = +12 °C	0.900	1.000
Pdh Tj = Tbiv	5.50 kW	5.20 kW
COP Tj = Tbiv	3.10	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.50 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	14 W	14 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.62 kW	1.70 kW
Annual energy consumption Qhe	3012 kWh	3594 kWh