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Summary of	Vitocal 100-S/111-S 12-16kW 230V	Reg. No.	011-1W0403
Certificate Holder			
Name	Viessmann Wärmepumpen GmbH		
Address	Viessmannstr. 1	Zip	35107
City	Allendorf/Eder	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	Vitocal 100-S/111-S 12-16kW 230V		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	2.5 kg		
Certification Date	02.11.2020		
Testing basis	HP KEYMARK certification scheme rules rev. 7		

Model: Vitocal 100-S AWB-M 101.A12

Configure model	
Model name	Vitocal 100-S AWB-M 101.A12
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.50 kW	9.86 kW
El input	2.45 kW	3.52 kW
COP	4.70	2.80

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	8.90 kW		
η_s	160 %	113 %	
P _{rated}	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.15 kW	7.84 kW	
COP T _j = -7°C	2.88	1.93	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.17 kW	5.54 kW	
COP T _j = +2°C	3.93	2.76	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.99 kW	9.25 kW	
COP T _j = +7°C	5.31	3.89	

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Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.44 kW	6.77 kW
COP Tj = 12°C	7.15	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.15 kW	7.84 kW
COP Tj = Tbiv	2.88	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.46 kW	7.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.75 kW	1.84 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	19044 kWh	18303 kWh

Model: Vitocal 100-S AWB-M-E 101.A12

Configure model	
Model name	Vitocal 100-S AWB-M-E 101.A12
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.50 kW	9.86 kW
El input	2.45 kW	3.52 kW
COP	4.70	2.80

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

Average Climate

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EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	8.90 kW		
η_s	160 %	113 %	
P _{rated}	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.15 kW	7.84 kW	
COP T _j = -7°C	2.88	1.93	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.17 kW	5.54 kW	
COP T _j = +2°C	3.93	2.76	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.99 kW	9.25 kW	
COP T _j = +7°C	5.31	3.89	

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Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.15 kW	7.84 kW
COP Tj = Tbiv	2.88	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.46 kW	7.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.75 kW	1.84 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	19044 kWh	18303 kWh

Model: Vitocal 100-S AWB-M-E-AC 101.A12

Configure model	
Model name	Vitocal 100-S AWB-M-E-AC 101.A12
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.50 kW	9.86 kW
El input	2.45 kW	3.52 kW
COP	4.70	2.80

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

Average Climate

This information was generated by the HP KEYMARK database on 22 Jun 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
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EN 14825

		Low temperature	Medium temperature
P _{designh}	8.90 kW		
η_s	160 %	113 %	
P _{rated}	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.15 kW	7.84 kW	
COP T _j = -7°C	2.88	1.93	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.17 kW	5.54 kW	
COP T _j = +2°C	3.93	2.76	
C _{dh} T _j = +2 °C	0.99	0.99	
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Cdh Tj = +12 °C	0.99	0.99
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Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.75 kW	1.84 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	19044 kWh	18303 kWh

Model: Vitocal 100-S AWB-M-E-AC 101.A12 F

Configure model	
Model name	Vitocal 100-S AWB-M-E-AC 101.A12 F
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.50 kW	9.86 kW
El input	2.45 kW	3.52 kW
COP	4.70	2.80

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	8.90 kW		
η_s	160 %	113 %	
Pr _{ated}	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.15 kW	7.84 kW	
COP T _j = -7°C	2.88	1.93	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.17 kW	5.54 kW	
COP T _j = +2°C	3.93	2.76	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.99 kW	9.25 kW	
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COP Tj = Tbiv	2.88	1.93
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.75 kW	1.84 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	19044 kWh	18303 kWh

Model: Vitocal 111-S AWBT-M-AC 111.A12

Configure model

Model name	Vitocal 111-S AWBT-M-AC 111.A12
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data

Power supply	1x230V 50Hz
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	11.50 kW	9.86 kW
El input	2.45 kW	3.52 kW
COP	4.70	2.80

EN 14511-4

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	8.90 kW		
η_s	160 %	113 %	
P _{rated}	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.15 kW	7.84 kW	
COP T _j = -7°C	2.88	1.93	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.17 kW	5.54 kW	
COP T _j = +2°C	3.93	2.76	
C _{dh} T _j = +2 °C	0.99	0.99	
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COP T _j = +7°C	5.31	3.89	

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Pdh Tj = 12°C	7.44 kW	6.77 kW
COP Tj = 12°C	7.15	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.15 kW	7.84 kW
COP Tj = Tbiv	2.88	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.46 kW	7.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.75 kW	1.84 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	19044 kWh	18303 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	124 %
COP	2.55
Heating up time	0:58 h:min
Standby power input	35.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	290 l

Model: Vitocal 111-S AWBT-M-E 111.A12

Configure model	
Model name	Vitocal 111-S AWBT-M-E 111.A12
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.50 kW	9.86 kW
El input	2.45 kW	3.52 kW
COP	4.70	2.80

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	8.90 kW		
η_s	160 %	113 %	
Prated	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.15 kW	7.84 kW	
COP T _j = -7°C	2.88	1.93	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.17 kW	5.54 kW	
COP T _j = +2°C	3.93	2.76	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.99 kW	9.25 kW	
COP T _j = +7°C	5.31	3.89	

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Pdh Tj = 12°C	7.44 kW	6.77 kW
COP Tj = 12°C	7.15	5.44
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Pdh Tj = Tbiv	8.15 kW	7.84 kW
COP Tj = Tbiv	2.88	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.46 kW	7.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.75 kW	1.84 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	19044 kWh	18303 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	124 %
COP	2.55
Heating up time	0:58 h:min
Standby power input	35.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	290 l

Model: Vitocal 111-S AWBT-M-E-AC 111.A12

Configure model	
Model name	Vitocal 111-S AWBT-M-E-AC 111.A12
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.50 kW	9.86 kW
El input	2.45 kW	3.52 kW
COP	4.70	2.80

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	8.90 kW		
η_s	160 %	113 %	
Prated	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.15 kW	7.84 kW	
COP T _j = -7°C	2.88	1.93	
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Supplementary Heater: PSUP	2.75 kW	1.84 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	19044 kWh	18303 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	124 %
COP	2.55
Heating up time	0:58 h:min
Standby power input	35.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	290 l

Model: Vitocal 111-S AWBT-M-E-AC 111.A12 F

Configure model

Model name	Vitocal 111-S AWBT-M-E-AC 111.A12 F
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data

Power supply	1x230V 50Hz
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	11.50 kW	9.86 kW
El input	2.45 kW	3.52 kW
COP	4.70	2.80

EN 14511-4

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
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EN 14825

		Low temperature	Medium temperature
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PCK	0 W	0 W
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Supplementary Heater: PSUP	2.75 kW	1.84 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	19044 kWh	18303 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	124 %
COP	2.55
Heating up time	0:58 h:min
Standby power input	35.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	290 l

Model: Vitocal 100-S AWB-M 101.A14

Configure model	
Model name	Vitocal 100-S AWB-M 101.A14
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	11.82 kW
El input	2.89 kW	4.23 kW
COP	4.67	2.80

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	10.70 kW		
η_s	160 %	117 %	
P _{rated}	9.90 kW	10.70 kW	
SCOP	4.08	3.00	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.73 kW	9.44 kW	
COP T _j = -7°C	2.86	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.34 kW	6.11 kW	
COP T _j = +2°C	3.92	2.82	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.99 kW	9.33 kW	
COP T _j = +7°C	5.31	4.03	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.44 kW	6.77 kW
COP Tj = 12°C	7.15	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.73 kW	9.44 kW
COP Tj = Tbiv	2.86	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.46 kW	6.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.41 kW	3.86 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	20384 kWh	22040 kWh

Model: Vitocal 100-S AWB-M-E 101.A14

Configure model	
Model name	Vitocal 100-S AWB-M-E 101.A14
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	11.82 kW
El input	2.89 kW	4.23 kW
COP	4.67	2.80

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	10.70 kW		
η_s	160 %	117 %	
P _{rated}	9.90 kW	10.70 kW	
SCOP	4.08	3.00	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.73 kW	9.44 kW	
COP T _j = -7°C	2.86	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.34 kW	6.11 kW	
COP T _j = +2°C	3.92	2.82	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.99 kW	9.33 kW	
COP T _j = +7°C	5.31	4.03	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.44 kW	6.77 kW
COP Tj = 12°C	7.15	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.73 kW	9.44 kW
COP Tj = Tbiv	2.86	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.46 kW	6.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.41 kW	3.86 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	20384 kWh	22040 kWh

Model: Vitocal 100-S AWB-M-E-AC 101.A14

Configure model	
Model name	Vitocal 100-S AWB-M-E-AC 101.A14
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	11.82 kW
El input	2.89 kW	4.23 kW
COP	4.67	2.80

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	10.70 kW		
η_s	160 %	117 %	
P _{rated}	9.90 kW	10.70 kW	
SCOP	4.08	3.00	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.73 kW	9.44 kW	
COP T _j = -7°C	2.86	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.34 kW	6.11 kW	
COP T _j = +2°C	3.92	2.82	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.99 kW	9.33 kW	
COP T _j = +7°C	5.31	4.03	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.44 kW	6.77 kW
COP Tj = 12°C	7.15	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.73 kW	9.44 kW
COP Tj = Tbiv	2.86	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.46 kW	6.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.41 kW	3.86 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	20384 kWh	22040 kWh

Model: Vitocal 100-S AWB-M-E-AC 101.A14 F

Configure model	
Model name	Vitocal 100-S AWB-M-E-AC 101.A14 F
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	11.82 kW
El input	2.89 kW	4.23 kW
COP	4.67	2.80

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	10.70 kW		
η_s	160 %	117 %	
P _{rated}	9.90 kW	10.70 kW	
SCOP	4.08	3.00	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.73 kW	9.44 kW	
COP T _j = -7°C	2.86	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.34 kW	6.11 kW	
COP T _j = +2°C	3.92	2.82	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.99 kW	9.33 kW	
COP T _j = +7°C	5.31	4.03	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.44 kW	6.77 kW
COP Tj = 12°C	7.15	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.73 kW	9.44 kW
COP Tj = Tbiv	2.86	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.46 kW	6.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.41 kW	3.86 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	20384 kWh	22040 kWh

Model: Vitocal 111-S AWBT-M-AC 111.A14

Configure model

Model name	Vitocal 111-S AWBT-M-AC 111.A14
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data

Power supply	1x230V 50Hz
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	13.50 kW	11.82 kW
El input	2.89 kW	4.23 kW
COP	4.67	2.80

EN 14511-4

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	10.70 kW		
η_s	160 %	117 %	
P _{rated}	9.90 kW	10.70 kW	
SCOP	4.08	3.00	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.73 kW	9.44 kW	
COP T _j = -7°C	2.86	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.34 kW	6.11 kW	
COP T _j = +2°C	3.92	2.82	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.99 kW	9.33 kW	
COP T _j = +7°C	5.31	4.03	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.44 kW	6.77 kW
COP Tj = 12°C	7.15	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.73 kW	9.44 kW
COP Tj = Tbiv	2.86	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.46 kW	6.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	20384 kWh	22040 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	124 %
COP	2.55
Heating up time	0:58 h:min
Standby power input	35.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	290 l

Model: Vitocal 111-S AWBT-M-E 111.A14

Configure model	
Model name	Vitocal 111-S AWBT-M-E 111.A14
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	11.82 kW
El input	2.89 kW	4.23 kW
COP	4.67	2.80

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	10.70 kW		
η_s	160 %	117 %	
Prated	9.90 kW	10.70 kW	
SCOP	4.08	3.00	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.73 kW	9.44 kW	
COP T _j = -7°C	2.86	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.34 kW	6.11 kW	
COP T _j = +2°C	3.92	2.82	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.99 kW	9.33 kW	
COP T _j = +7°C	5.31	4.03	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.44 kW	6.77 kW
COP Tj = 12°C	7.15	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.73 kW	9.44 kW
COP Tj = Tbiv	2.86	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.46 kW	6.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.41 kW	3.86 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	20384 kWh	22040 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	124 %
COP	2.55
Heating up time	0:58 h:min
Standby power input	35.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	290 l

Model: Vitocal 111-S AWBT-M-E-AC 111.A14

Configure model	
Model name	Vitocal 111-S AWBT-M-E-AC 111.A14
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	11.82 kW
El input	2.89 kW	4.23 kW
COP	4.67	2.80

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	10.70 kW		
η_s	160 %	117 %	
P _{rated}	9.90 kW	10.70 kW	
SCOP	4.08	3.00	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.73 kW	9.44 kW	
COP T _j = -7°C	2.86	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.34 kW	6.11 kW	
COP T _j = +2°C	3.92	2.82	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.99 kW	9.33 kW	
COP T _j = +7°C	5.31	4.03	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.44 kW	6.77 kW
COP Tj = 12°C	7.15	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.73 kW	9.44 kW
COP Tj = Tbiv	2.86	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.46 kW	6.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.41 kW	3.86 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	20384 kWh	22040 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	124 %
COP	2.55
Heating up time	0:58 h:min
Standby power input	35.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	290 l

Model: Vitocal 111-S AWBT-M-E-AC 111.A14 F

Configure model	
Model name	Vitocal 111-S AWBT-M-E-AC 111.A14 F
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	11.82 kW
El input	2.89 kW	4.23 kW
COP	4.67	2.80

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	10.70 kW		
η_s	160 %	117 %	
P _{rated}	9.90 kW	10.70 kW	
SCOP	4.08	3.00	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.73 kW	9.44 kW	
COP T _j = -7°C	2.86	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.34 kW	6.11 kW	
COP T _j = +2°C	3.92	2.82	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.99 kW	9.33 kW	
COP T _j = +7°C	5.31	4.03	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.44 kW	6.77 kW
COP Tj = 12°C	7.15	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.73 kW	9.44 kW
COP Tj = Tbiv	2.86	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.46 kW	6.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.41 kW	3.86 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	20384 kWh	22040 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	124 %
COP	2.55
Heating up time	0:58 h:min
Standby power input	35.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	290 l

Model: Vitocal 100-S AWB-M 101.A16

Configure model	
Model name	Vitocal 100-S AWB-M 101.A16
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	15.50 kW	13.43 kW
El input	3.42 kW	4.94 kW
COP	4.53	2.72

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	11.80 kW		
η_s	155 %	119 %	
P _{rated}	10.00 kW	11.80 kW	
SCOP	3.95	3.05	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.85 kW	10.45 kW	
COP T _j = -7°C	2.54	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.60 kW	6.65 kW	
COP T _j = +2°C	3.76	2.86	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.93 kW	9.42 kW	
COP T _j = +7°C	5.40	4.13	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.93 kW	6.77 kW
COP Tj = 12°C	6.49	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.85 kW	10.45 kW
COP Tj = Tbiv	2.54	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.44 kW	7.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	7.15	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.56 kW	4.00 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	24394 kWh	24394 kWh

Model: Vitocal 100-S AWB-M-E 101.A16

Configure model	
Model name	Vitocal 100-S AWB-M-E 101.A16
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	15.50 kW	13.43 kW
El input	3.42 kW	4.94 kW
COP	4.53	2.72

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	11.80 kW		
η_s	155 %	119 %	
P _{rated}	10.00 kW	11.80 kW	
SCOP	3.95	3.05	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.85 kW	10.45 kW	
COP T _j = -7°C	2.54	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.60 kW	6.65 kW	
COP T _j = +2°C	3.76	2.86	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.93 kW	9.42 kW	
COP T _j = +7°C	5.40	4.13	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.93 kW	6.77 kW
COP Tj = 12°C	6.49	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.85 kW	10.45 kW
COP Tj = Tbiv	2.54	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.44 kW	7.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	7.15	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.56 kW	4.00 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	24394 kWh	24394 kWh

Model: Vitocal 100-S AWB-M-E-AC 101.A16

Configure model	
Model name	Vitocal 100-S AWB-M-E-AC 101.A16
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	15.50 kW	13.43 kW
El input	3.42 kW	4.94 kW
COP	4.53	2.72

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	11.80 kW		
η_s	155 %	119 %	
P _{rated}	10.00 kW	11.80 kW	
SCOP	3.95	3.05	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.85 kW	10.45 kW	
COP T _j = -7°C	2.54	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.60 kW	6.65 kW	
COP T _j = +2°C	3.76	2.86	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.93 kW	9.42 kW	
COP T _j = +7°C	5.40	4.13	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.93 kW	6.77 kW
COP Tj = 12°C	6.49	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.85 kW	10.45 kW
COP Tj = Tbiv	2.54	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.44 kW	7.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	7.15	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.56 kW	4.00 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	24394 kWh	24394 kWh

Model: Vitocal 100-S AWB-M-E-AC 101.A16 F

Configure model	
Model name	Vitocal 100-S AWB-M-E-AC 101.A16 F
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	15.50 kW	13.43 kW
El input	3.42 kW	4.94 kW
COP	4.53	2.72

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	11.80 kW		
η_s	155 %	119 %	
P _{rated}	10.00 kW	11.80 kW	
SCOP	3.95	3.05	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.85 kW	10.45 kW	
COP T _j = -7°C	2.54	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.60 kW	6.65 kW	
COP T _j = +2°C	3.76	2.86	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.93 kW	9.42 kW	
COP T _j = +7°C	5.40	4.13	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.93 kW	6.77 kW
COP Tj = 12°C	6.49	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.85 kW	10.45 kW
COP Tj = Tbiv	2.54	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.44 kW	7.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	7.15	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.56 kW	4.00 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	24394 kWh	24394 kWh

Model: Vitocal 111-S AWBT-M-AC 111.A16

Configure model

Model name	Vitocal 111-S AWBT-M-AC 111.A16
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data

Power supply	1x230V 50Hz
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	15.50 kW	13.43 kW
El input	3.42 kW	4.94 kW
COP	4.53	2.72

EN 14511-4

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	11.80 kW		
η_s	155 %	119 %	
P _{rated}	10.00 kW	11.80 kW	
SCOP	3.95	3.05	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.85 kW	10.45 kW	
COP T _j = -7°C	2.54	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.60 kW	6.65 kW	
COP T _j = +2°C	3.76	2.86	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.93 kW	9.42 kW	
COP T _j = +7°C	5.40	4.13	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.93 kW	6.77 kW
COP Tj = 12°C	6.49	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.85 kW	10.45 kW
COP Tj = Tbiv	2.54	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.44 kW	7.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	7.15	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.56 kW	4.00 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	24394 kWh	24394 kWh

Domestic Hot Water (DHW)

Average Climate

This information was generated by the HP KEYMARK database on 22 Jun 2022

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	124 %
COP	2.55
Heating up time	0:58 h:min
Standby power input	35.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	290 l

Model: Vitocal 111-S AWBT-M-E 111.A16

Configure model	
Model name	Vitocal 111-S AWBT-M-E 111.A16
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	15.50 kW	13.43 kW
El input	3.42 kW	4.94 kW
COP	4.53	2.72

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	11.80 kW		
η_s	155 %	119 %	
P _{rated}	10.00 kW	11.80 kW	
SCOP	3.95	3.05	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.85 kW	10.45 kW	
COP T _j = -7°C	2.54	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.60 kW	6.65 kW	
COP T _j = +2°C	3.76	2.86	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.93 kW	9.42 kW	
COP T _j = +7°C	5.40	4.13	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.93 kW	6.77 kW
COP Tj = 12°C	6.49	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.85 kW	10.45 kW
COP Tj = Tbiv	2.54	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.44 kW	7.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	7.15	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.56 kW	4.00 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	24394 kWh	24394 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	124 %
COP	2.55
Heating up time	0:58 h:min
Standby power input	35.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	290 l

Model: Vitocal 111-S AWBT-M-E-AC 111.A16

Configure model	
Model name	Vitocal 111-S AWBT-M-E-AC 111.A16
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	15.50 kW	13.43 kW
El input	3.42 kW	4.94 kW
COP	4.53	2.72

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	11.80 kW		
η_s	155 %	119 %	
P _{rated}	10.00 kW	11.80 kW	
SCOP	3.95	3.05	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.85 kW	10.45 kW	
COP T _j = -7°C	2.54	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.60 kW	6.65 kW	
COP T _j = +2°C	3.76	2.86	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.93 kW	9.42 kW	
COP T _j = +7°C	5.40	4.13	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.93 kW	6.77 kW
COP Tj = 12°C	6.49	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.85 kW	10.45 kW
COP Tj = Tbiv	2.54	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.44 kW	7.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	7.15	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.56 kW	4.00 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	24394 kWh	24394 kWh

Domestic Hot Water (DHW)

Average Climate

This information was generated by the HP KEYMARK database on 22 Jun 2022

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	124 %
COP	2.55
Heating up time	0:58 h:min
Standby power input	35.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	290 l

Model: Vitocal 111-S AWBT-M-E-AC 111.A16 F

Configure model	
Model name	Vitocal 111-S AWBT-M-E-AC 111.A16 F
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	15.50 kW	13.43 kW
El input	3.42 kW	4.94 kW
COP	4.53	2.72

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825

		Low temperature	Medium temperature
P _{designh}	11.80 kW		
η_s	155 %	119 %	
P _{rated}	10.00 kW	11.80 kW	
SCOP	3.95	3.05	
T _{biv}	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
P _{dh} T _j = -7°C	8.85 kW	10.45 kW	
COP T _j = -7°C	2.54	2.05	
C _{dh} T _j = -7 °C	0.99	0.99	
P _{dh} T _j = +2°C	6.60 kW	6.65 kW	
COP T _j = +2°C	3.76	2.86	
C _{dh} T _j = +2 °C	0.99	0.99	
P _{dh} T _j = +7°C	5.93 kW	9.42 kW	
COP T _j = +7°C	5.40	4.13	

This information was generated by the HP KEYMARK database on 22 Jun 2022

Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.93 kW	6.77 kW
COP Tj = 12°C	6.49	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.85 kW	10.45 kW
COP Tj = Tbiv	2.54	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.44 kW	7.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	7.15	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.56 kW	4.00 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	24394 kWh	24394 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	124 %
COP	2.55
Heating up time	0:58 h:min
Standby power input	35.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	290 l