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Summary of	Vitocal 100-S/111-S 12-16kW 400V	Reg. No.	011-1W0404	
Certificate Holder				
Name	Viessmann Wärmepumpen GmbH	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 400V			
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 101.A12

Configure model			
Model name	Vitocal 100-S AWB 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	3x400V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	11.50 kW	9.72 kW	
El input	2.58 kW	3.65 kW	
СОР	4.45	2.66	

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



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
Pdesignh	8.80 kW		
η_{s}	156 %	110 %	
Prated	9.00 kW	8.79 kW	
SCOP	3.98	2.83	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	7.98 kW	7.70 kW	
COP Tj = -7°C	2.87	1.93	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	5.63 kW	5.17 kW	
COP Tj = +2°C	3.90	3.50	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	5.78 kW	8.52 kW	
COP Tj = +7°C	4.86	3.66	





		-
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.35 kW	6.41 kW
COP Tj = 12°C	6.08	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.98 kW	7.70 kW
COP Tj = Tbiv	2.87	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.54 kW	6.94 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	1.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	o w	0 W
PSB	o w	0 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.48 kW	1.85 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	4696 kWh	6362 kWh

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

Configure model		
Model name	Vitocal 100-S AWB-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	3x400V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	11.50 kW	9.72 kW	
El input	2.58 kW	3.65 kW	
СОР	4.45	2.66	

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



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
Pdesignh	8.80 kW		
η_{s}	156 %	110 %	
Prated	9.00 kW	8.79 kW	
SCOP	3.98	2.83	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	7.98 kW	7.70 kW	
COP Tj = -7°C	2.87	1.93	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	5.63 kW	5.17 kW	
COP Tj = +2°C	3.90	3.50	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	5.78 kW	8.52 kW	
COP Tj = +7°C	4.86	3.66	





Cdh Tj = +7 °C 0.99 0.99 Pdh Tj = 12°C 14.35 kW 6.41 kW COP Tj = 12°C 6.08 4.84 Cdh Tj = +12 °C 0.99 0.99 Pdh Tj = Tbiv 7.98 kW 7.70 kW COP Tj = Tbiv 2.87 1.93 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < 7.54 kW 6.94 kW COP Tj = TOL or COP TJ = Tdesignh if TOL < 2.80 1.75 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < 0.99 0.99 WTOL 55 °C 55 °C Poff 15 W 15 W PTO 0 W 0 W PSB 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.48 kW 1.85 kW Backup Heater 0.00 kW Annual energy consumption Qhe 4696 kWh			,
COP Tj = 12°C	Cdh Tj = +7 °C	0.99	0.99
Cdh Tj = +12 °C 0.99 0.99 Pdh Tj = Tbiv 7.98 kW 7.70 kW COP Tj = Tbiv 2.87 1.93 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL 7.54 kW 6.94 kW COP Tj = TOL or COP Tj = Tdesignh if TOL 2.80 1.75 Tdesignh 0.99 0.99 WTOL 55 °C 55 °C Poff 15 W 15 W PTO 0 W 0 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.48 kW 1.85 kW Annual energy consumption Qhe 4696 6362 kWh	Pdh Tj = 12°C	14.35 kW	6.41 kW
Pdh Tj = Tbiv 7.98 kW 7.70 kW COP Tj = Tbiv 2.87 1.93 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL 7.54 kW 6.94 kW COP Tj = TOL or COP Tj = Tdesignh if TOL 2.80 1.75 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL 0.99 0.99 WTOL 55 °C 55 °C Poff 15 W 15 W PTO 0 W 0 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.48 kW 1.85 kW Backup Heater 0.00 kW Annual energy consumption Qhe 4696 6362 kWh	COP Tj = 12°C	6.08	4.84
COP Tj = Tbiv 2.87 1.93 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL 7.54 kW 6.94 kW COP Tj = TOL or COP Tj = Tdesignh if TOL <	Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL 7.54 kW 6.94 kW COP Tj = TOL or COP Tj = Tdesignh if TOL 2.80 1.75 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL 0.99 0.99 WTOL 55 °C 55 °C Poff 15 W 15 W PTO 0 W 0 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.48 kW 1.85 kW Backup Heater 0.00 kW Annual energy consumption Qhe 4696 6362 kWh	Pdh Tj = Tbiv	7.98 kW	7.70 kW
Tdesignh 2.80 1.75 COP Tj = TOL or COP Tj = Tdesignh if TOL 2.80 1.75 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL 0.99 0.99 WTOL 55 °C 55 °C Poff 15 W 15 W PTO 0 W 0 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.48 kW 1.85 kW Backup Heater 0.00 kW Annual energy consumption Qhe 4696 6362 kWh	COP Tj = Tbiv	2.87	1.93
Tdesignh 0.99 0.99 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL 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 1.48 kW 1.85 kW Backup Heater 0.00 kW Annual energy consumption Qhe 4696 6362 kWh	Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	7.54 kW	6.94 kW
Tdesignh 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 1.48 kW 1.85 kW Backup Heater 0.00 kW Annual energy consumption Qhe 4696 6362 kWh		2.80	1.75
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 1.48 kW 1.85 kW Backup Heater 0.00 kW Annual energy consumption Qhe 4696 6362 kWh	Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	0.99	0.99
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 1.48 kW 1.85 kW Backup Heater 0.00 kW Annual energy consumption Qhe 4696 6362 kWh	WTOL	55 °C	55 °C
PSB 0 W 0 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.48 kW 1.85 kW Backup Heater 0.00 kW Annual energy consumption Qhe 4696 6362 kWh	Poff	15 W	15 W
PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 1.48 kW 1.85 kW Backup Heater 0.00 kW Annual energy consumption Qhe 4696 6362 kWh	РТО	0 W	0 W
Supplementary Heater: Type of energy input Electricity Electricity 1.48 kW 1.85 kW Backup Heater 0.00 kW Annual energy consumption Qhe 4696 6362 kWh	PSB	0 W	0 W
Supplementary Heater: PSUP 1.48 kW 1.85 kW Backup Heater 0.00 kW Annual energy consumption Qhe 4696 6362 kWh	PCK	0 W	0 W
Backup Heater 0.00 kW Annual energy consumption Qhe 4696 6362 kWh	Supplementary Heater: Type of energy input	Electricity	Electricity
Annual energy consumption Qhe 4696 6362 kWh	Supplementary Heater: PSUP	1.48 kW	1.85 kW
	Backup Heater	0.00 kW	
	Annual energy consumption Qhe		6362 kWh



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

Configure model		
Model name	Vitocal 100-S AWB-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	3x400V 50Hz	

Heating

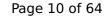
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	11.50 kW	9.72 kW	
El input	2.58 kW	3.65 kW	
СОР	4.45	2.66	

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



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
Pdesignh	8.80 kW		
η_{s}	156 %	110 %	
Prated	9.00 kW	8.79 kW	
SCOP	3.98	2.83	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	7.98 kW	7.70 kW	
COP Tj = -7°C	2.87	1.93	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	5.63 kW	5.17 kW	
COP Tj = +2°C	3.90	3.50	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	5.78 kW	8.52 kW	
COP Tj = +7°C	4.86	3.66	





		-
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.35 kW	6.41 kW
COP Tj = 12°C	6.08	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.98 kW	7.70 kW
COP Tj = Tbiv	2.87	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.54 kW	6.94 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	1.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	o w	0 W
PSB	o w	0 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.48 kW	1.85 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	4696 kWh	6362 kWh



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

Configure model		
Model name	Vitocal 111-S AWBT-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	3x400V 50Hz	

Heating

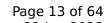
EN 14511-2			
Low temperature Medium temperature			
Heat output	11.50 kW	9.72 kW	
El input	2.58 kW	3.65 kW	
СОР	4.45	2.66	

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



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
Pdesignh	8.80 kW		
η_{s}	156 %	110 %	
Prated	9.00 kW	8.79 kW	
SCOP	3.98	2.83	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	7.98 kW	7.70 kW	
COP Tj = -7°C	2.87	1.93	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	5.63 kW	5.17 kW	
COP Tj = +2°C	3.90	3.50	
Cdh Tj = +2 °C	n/a	0.99	
Pdh Tj = +7°C	5.78 kW	8.52 kW	
$COP Tj = +7^{\circ}C$	4.86	3.66	

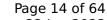




This information was g	enerated b	y the HP KEYMARK	database on 22 Jun 2022
	0.99	0.99	

Cdh Tj = +7 °C	0.99	0.99	
Pdh Tj = 12°C	14.35 kW	6.41 kW	
COP Tj = 12°C	6.08	4.84	
Cdh Tj = +12 °C	0.99	0.99	
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.54 kW	6.94 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	1.75	
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	o w	
PSB	0 W	o w	
PCK	0 W	o w	
Supplementary Heater: Type of energy input	Electricity	Electricity	
Supplementary Heater: PSUP	1.48 kW	1.85 kW	
Backup Heater	0.00 kW		•
Annual energy consumption Qhe	4696 kWh	6362 kWh	

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	124 %	
СОР	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	

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

Configure model			
Model name Vitocal 111-S AWBT-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 3x400V 50Hz		

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	11.50 kW	9.72 kW	
El input	2.58 kW	3.65 kW	
СОР	4.45	2.66	

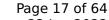
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



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)	

CEN heat pump KEYMARK

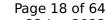
EN 14825			
		Low temperature	Medium temperature
Pdesignh	8.80 kW		!
η_{s}	156 %	110 %	
Prated	9.00 kW	8.79 kW	-
SCOP	3.98	2.83	-
Tbiv	-7 °C	-7 °C	-
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	7.98 kW	7.70 kW	
COP Tj = -7° C	2.87	1.93	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	5.63 kW	5.17 kW	
COP Tj = +2°C	3.90	3.50	
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Pdh Tj = $+7$ °C	5.78 kW	8.52 kW	
$COP Tj = +7^{\circ}C$	4.86	3.66	





		-
Cdh Tj = +7 °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
РТО	o w	0 W
PSB	o w	0 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.48 kW	1.85 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	4696 kWh	6362 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	124 %	
СОР	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 I	

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

Configure model		
Model name	Vitocal 111-S AWBT-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	3x400V 50Hz	

Heating

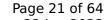
EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.50 kW	9.72 kW
El input	2.58 kW	3.65 kW
СОР	4.45	2.66

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



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)

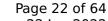
EN 14825			
		Low temperature	Medium temperature
Pdesignh	8.80 kW		
η_{s}	156 %	110 %	
Prated	9.00 kW	8.79 kW	
SCOP	3.98	2.83	
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Pdh Tj = -7°C	7.98 kW	7.70 kW	
COP Tj = -7°C	2.87	1.93	
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Pdh Tj = $+2$ °C	5.63 kW	5.17 kW	
COP Tj = +2°C	3.90	3.50	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	5.78 kW	8.52 kW	
COP Tj = +7°C	4.86	3.66	





		-
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.35 kW	6.41 kW
COP Tj = 12°C	6.08	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.98 kW	7.70 kW
COP Tj = Tbiv	2.87	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.54 kW	6.94 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	1.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	o w	0 W
PSB	o w	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.48 kW	1.85 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	4696 kWh	6362 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	124 %	
СОР	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 I	

Model: Vitocal 100-S AWB 101.A14

Configure model		
Model name	Vitocal 100-S AWB 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	3x400V 50Hz	

Heating

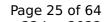
EN 14511-2			
Low temperature Medium temperature			
Heat output	13.50 kW	11.61 kW	
El input	3.00 kW	4.38 kW	
СОР	4.50	2.81	

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



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	
9.80 kW			
154 %	111 %		
8.90 kW	9.80 kW		
3.93	2.85		
-7 °C	-7 °C		
-20 °C	-20 °C		
7.92 kW	8.70 kW		
2.55	2.02		
0.99	0.99		
6.35 kW	5.90 kW		
3.91	2.68		
0.99	0.99		
5.97 kW	8.12 kW		
5.04	3.75		
	9.80 kW 154 % 8.90 kW 3.93 -7 °C -20 °C 7.92 kW 2.55 0.99 6.35 kW 3.91 0.99 5.97 kW	Low temperature 9.80 kW 154 % 111 % 8.90 kW 3.93 2.85 -7 °C -20 °C -20 °C 7.92 kW 8.70 kW 2.55 2.02 0.99 0.99 6.35 kW 5.90 kW 3.91 2.68 0.99 0.99 5.97 kW 8.12 kW	





	,	,
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.35 kW	6.41 kW
COP Tj = 12°C	6.08	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.92 kW	8.70 kW
COP Tj = Tbiv	2.55	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	8.52 kW	7.71 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	o w	o w
PSB	o w	0 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	2.13 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	18488 kWh	20328 kWh



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

Configure model			
Model name	Vitocal 100-S AWB-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	3x400V 50Hz	

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	13.50 kW	11.61 kW	
El input	3.00 kW	4.38 kW	
СОР	4.50	2.81	

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



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
Pdesignh	9.80 kW		-
η_{s}	154 %	111 %	
Prated	8.90 kW	9.80 kW	
SCOP	3.93	2.85	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	7.92 kW	8.70 kW	
COP Tj = -7°C	2.55	2.02	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	6.35 kW	5.90 kW	
COP Tj = +2°C	3.91	2.68	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	5.97 kW	8.12 kW	
$COP Tj = +7^{\circ}C$	5.04	3.75	





	,	,
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.35 kW	6.41 kW
COP Tj = 12°C	6.08	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.92 kW	8.70 kW
COP Tj = Tbiv	2.55	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	8.52 kW	7.71 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	o w	o w
PSB	o w	0 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	2.13 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	18488 kWh	20328 kWh



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

Configure model		
Model name	Vitocal 100-S AWB-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	3x400V 50Hz	

Heating

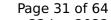
EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	11.61 kW
El input	3.00 kW	4.38 kW
СОР	4.50	2.81

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



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
Pdesignh	9.80 kW		-
η_{s}	154 %	111 %	
Prated	8.90 kW	9.80 kW	
SCOP	3.93	2.85	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	7.92 kW	8.70 kW	
COP Tj = -7°C	2.55	2.02	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	6.35 kW	5.90 kW	
COP Tj = +2°C	3.91	2.68	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	5.97 kW	8.12 kW	
$COP Tj = +7^{\circ}C$	5.04	3.75	





		y the HI KETMAKK
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.35 kW	6.41 kW
COP Tj = 12°C	6.08	4.84
Cdh Tj = $+12$ °C	0.99	0.99
Pdh Tj = Tbiv	7.92 kW	8.70 kW
COP Tj = Tbiv	2.55	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	8.52 kW	7.71 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	0 W	o w
PSB	0 W	o w
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	2.13 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	18488 kWh	20328 kWh



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

Configure model		
Model name	Vitocal 111-S AWBT-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	3x400V 50Hz	

Heating

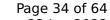
EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	11.61 kW
El input	3.00 kW	4.38 kW
СОР	4.50	2.81

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



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)

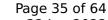
EN 14825			
		Low temperature	Medium temperature
Pdesignh	9.80 kW		<u>'</u>
η_{s}	154 %	111 %	
Prated	8.90 kW	9.80 kW	
SCOP	3.93	2.85	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	7.92 kW	8.70 kW	
$COPTj = -7^{\circ}C$	2.55	2.02	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	6.35 kW	5.90 kW	
COP Tj = +2°C	3.91	2.68	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	5.97 kW	8.12 kW	
$COPTj = +7^{\circ}C$	5.04	3.75	





	-	-
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.35 kW	6.41 kW
COP Tj = 12°C	6.08	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.92 kW	8.70 kW
COP Tj = Tbiv	2.55	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	8.52 kW	7.71 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	0 W	o w
PSB	0 W	o w
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	2.13 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	18488 kWh	20328 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	124 %	
СОР	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	



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

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

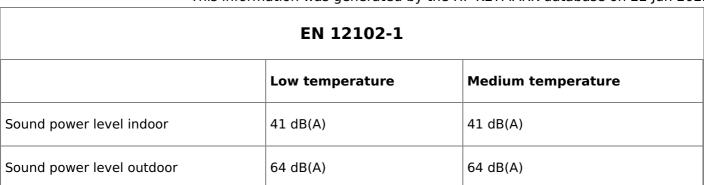
General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	11.61 kW
El input	3.00 kW	4.38 kW
СОР	4.50	2.81

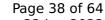
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed





CEN heat pump

EN 14825			
		Low temperature	Medium temperature
Pdesignh	9.80 kW		
η_{s}	154 %	111 %	
Prated	8.90 kW	9.80 kW	
SCOP	3.93	2.85	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	7.92 kW	8.70 kW	
COP Tj = -7°C	2.55	2.02	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.35 kW	5.90 kW	
$COPTj = +2^{\circ}C$	3.91	2.68	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.97 kW	8.12 kW	
COP Tj = +7°C	5.04	3.75	





This information was g	generated b	y the HP KEYMARK
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.35 kW	6.41 kW
COP Tj = 12°C	6.08	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.92 kW	8.70 kW
COP Tj = Tbiv	2.55	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.71 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	o w	o w
PSB	0 W	o w
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	2.13 kW
Backup Heater	0.00 kW	

Domestic Hot Water (DHW)

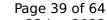
Annual energy consumption Qhe

Average Climate

18488

kWh

20328 kWh





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	124 %	
СОР	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	



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

Configure model		
Model name	Vitocal 111-S AWBT-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	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	11.61 kW
El input	3.00 kW	4.38 kW
СОР	4.50	2.81

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



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)

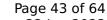
EN 14825			
		Low temperature	Medium temperature
Pdesignh	9.80 kW		
η_{s}	154 %	111 %	
Prated	8.90 kW	9.80 kW	
SCOP	3.93	2.85	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	7.92 kW	8.70 kW	
$COP Tj = -7^{\circ}C$	2.55	2.02	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.35 kW	5.90 kW	
COP Tj = +2°C	3.91	2.68	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.97 kW	8.12 kW	
$COP Tj = +7^{\circ}C$	5.04	3.75	





		1
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.35 kW	6.41 kW
COP Tj = 12°C	6.08	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	7.92 kW	8.70 kW
COP Tj = Tbiv	2.55	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	8.52 kW	7.71 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	o w	o w
PSB	o w	o w
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	2.13 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	18488 kWh	20328 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	124 %	
СОР	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	



Model: Vitocal 100-S AWB 101.A16

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

Genera	al Data
Power supply	3x400V 50Hz

Heating

	EN 14511-2	
	Low temperature	Medium temperature
Heat output	15.74 kW	12.67 kW
El input	3.60 kW	4.95 kW
СОР	4.37	2.62

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



	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
Pdesignh	10.80 kW		
η_{s}	151 %	111 %	
Prated	12.80 kW	10.83 kW	
SCOP	3.85	2.85	
Tbiv	-7 °C	-4 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	11.33 kW	9.20 kW	
$COP Tj = -7^{\circ}C$	2.46	1.89	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	7.16 kW	6.61 kW	
$COP Tj = +2^{\circ}C$	3.70	2.77	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.98 kW	5.08 kW	
$COP Tj = +7^{\circ}C$	5.17	3.74	





		·
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.17 kW	6.41 kW
COP Tj = 12°C	6.92	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.33 kW	8.33 kW
COP Tj = Tbiv	2.46	2.06
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.68 kW	9.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.41	1.88
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	o w	o w
PSB	o w	o w
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.12 kW	1.32 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	26449 kWh	22384 kWh
·		

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

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

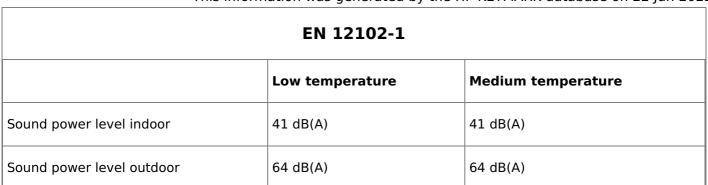
	General Data	
Power supply	3x400V 50Hz	

Heating

	EN 14511-2	
	Low temperature	Medium temperature
Heat output	15.74 kW	12.67 kW
El input	3.60 kW	4.95 kW
СОР	4.37	2.62

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





CEN heat pump

EN 14825			
		Low temperature	Medium temperature
Pdesignh	10.80 kW		<u> </u>
η_{s}	151 %	111 %	
Prated	12.80 kW	10.83 kW	
SCOP	3.85	2.85	
Tbiv	-7 °C	-4 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	11.33 kW	9.20 kW	
COP Tj = -7°C	2.46	1.89	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	7.16 kW	6.61 kW	
COP Tj = +2°C	3.70	2.77	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.98 kW	5.08 kW	
COP Tj = +7°C	5.17	3.74	





		·
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.17 kW	6.41 kW
COP Tj = 12°C	6.92	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.33 kW	8.33 kW
COP Tj = Tbiv	2.46	2.06
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.68 kW	9.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.41	1.88
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	o w	o w
PSB	o w	o w
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.12 kW	1.32 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	26449 kWh	22384 kWh
·		

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

Configure model		
Model name Vitocal 100-S AWB-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	3x400V 50Hz	

Heating

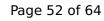
EN 14511-2			
Low temperature Medium temperature			
Heat output	15.74 kW	12.67 kW	
El input	3.60 kW	4.95 kW	
СОР	4.37	2.62	

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



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
Pdesignh	10.80 kW		-
η_{s}	151 %	111 %	
Prated	12.80 kW	10.83 kW	
SCOP	3.85	2.85	
Tbiv	-7 °C	-4 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	11.33 kW	9.20 kW	
COP Tj = -7°C	2.46	1.89	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	7.16 kW	6.61 kW	
$COP Tj = +2^{\circ}C$	3.70	2.77	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7$ °C	5.98 kW	5.08 kW	
$COP Tj = +7^{\circ}C$	5.17	3.74	





	,	,
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.17 kW	6.41 kW
COP Tj = 12°C	6.92	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.33 kW	8.33 kW
COP Tj = Tbiv	2.46	2.06
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.68 kW	9.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.41	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	o w	0 W
PSB	o w	0 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.12 kW	1.32 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	26449 kWh	22384 kWh

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

Configure model		
Model name Vitocal 111-S AWBT-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	3x400V 50Hz	

Heating

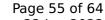
EN 14511-2			
Low temperature Medium temperature			
Heat output	15.74 kW	12.67 kW	
El input	3.60 kW	4.95 kW	
СОР	4.37	2.62	

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



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)	

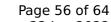
EN 14825			
		Low temperature	Medium temperature
Pdesignh	10.80 kW		
η_{s}	151 %	111 %	
Prated	12.80 kW	10.83 kW	
SCOP	3.85	2.85	
Tbiv	-7 °C	-4 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	11.33 kW	9.20 kW	
$COP Tj = -7^{\circ}C$	2.46	1.89	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	7.16 kW	6.61 kW	
$COP Tj = +2^{\circ}C$	3.70	2.77	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.98 kW	5.08 kW	
$COP Tj = +7^{\circ}C$	5.17	3.74	





Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.17 kW	6.41 kW
COP Tj = 12°C	6.92	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.33 kW	8.33 kW
COP Tj = Tbiv	2.46	2.06
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.68 kW	9.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.41	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	0 W	o w
PSB	0 W	o w
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.12 kW	1.32 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	26449 kWh	22384 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	124 %	
СОР	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 I	



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

Configure model		
Model name	Vitocal 111-S AWBT-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	3x400V 50Hz	

Heating

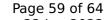
EN 14511-2		
	Low temperature	Medium temperature
Heat output	15.74 kW	12.67 kW
El input	3.60 kW	4.95 kW
СОР	4.37	2.62

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



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
Pdesignh	10.80 kW		
η_{s}	151 %	111 %	
Prated	12.80 kW	10.83 kW	
SCOP	3.85	2.85	
Tbiv	-7 °C	-4 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	11.33 kW	9.20 kW	
$COP Tj = -7^{\circ}C$	2.46	1.89	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	7.16 kW	6.61 kW	
$COP Tj = +2^{\circ}C$	3.70	2.77	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.98 kW	5.08 kW	
$COP Tj = +7^{\circ}C$	5.17	3.74	





		-
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.17 kW	6.41 kW
COP Tj = 12°C	6.92	4.84
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.33 kW	8.33 kW
COP Tj = Tbiv	2.46	2.06
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	10.68 kW	9.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.41	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	o w	o w
PSB	o w	o w
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.12 kW	1.32 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	26449 kWh	22384 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	124 %	
СОР	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 I	



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

Configure model		
Model name	Vitocal 111-S AWBT-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	3x400V 50Hz	

Heating

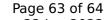
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	15.74 kW	12.67 kW	
El input	3.60 kW	4.95 kW	
СОР	4.37	2.62	

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



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)	

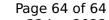
EN 14825			
		Low temperature	Medium temperature
Pdesignh	10.80 kW		
η_{s}	151 %	111 %	
Prated	12.80 kW	10.83 kW	
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Pdh Tj = 12°C	7.17 kW	6.41 kW
COP Tj = 12°C	6.92	4.84
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РТО	o w	o w
PSB	o w	o w
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.12 kW	1.32 kW
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