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Summary of	Vitocal 100-S/111-S 12-16kW 230V	Reg. No.	011-1W0403	
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 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	
СОР	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



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	8.90 kW		
η_{s}	160 %	113 %	
Prated	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.15 kW	7.84 kW	
$COP Tj = -7^{\circ}C$	2.88	1.93	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.17 kW	5.54 kW	
$COP Tj = +2^{\circ}C$	3.93	2.76	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.99 kW	9.25 kW	
$COP Tj = +7^{\circ}C$	5.31	3.89	





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
РТО	o w	o w
PSB	o w	o w
PCK	o 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
СОР	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



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	8.90 kW		
η_{s}	160 %	113 %	
Prated	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.15 kW	7.84 kW	
COP Tj = -7°C	2.88	1.93	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	6.17 kW	5.54 kW	
$COP Tj = +2^{\circ}C$	3.93	2.76	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	5.99 kW	9.25 kW	
$COP Tj = +7^{\circ}C$	5.31	3.89	





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
РТО	0 W	o w
PSB	o w	o w
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.75 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

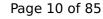
EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.50 kW	9.86 kW
El input	2.45 kW	3.52 kW
СОР	4.70	2.80

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



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	8.90 kW		
η_{s}	160 %	113 %	
Prated	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.15 kW	7.84 kW	
COP Tj = -7°C	2.88	1.93	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.17 kW	5.54 kW	
COP Tj = +2°C	3.93	2.76	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.99 kW	9.25 kW	
$COPTj = +7^{\circ}C$	5.31	3.89	





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
РТО	0 W	o w
PSB	o w	o w
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.75 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

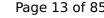
	EN 14511-2	
	Low temperature	Medium temperature
Heat output	11.50 kW	9.86 kW
El input	2.45 kW	3.52 kW
СОР	4.70	2.80

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



	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	8.90 kW		
η_{s}	160 %	113 %	
Prated	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.15 kW	7.84 kW	
COP Tj = -7°C	2.88	1.93	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	6.17 kW	5.54 kW	
$COP Tj = +2^{\circ}C$	3.93	2.76	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	5.99 kW	9.25 kW	
$COP Tj = +7^{\circ}C$	5.31	3.89	





$$\operatorname{\textit{Page}}\ 13$$ of 85 This information was generated by the HP KEYMARK database on 18 Mar 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	8.15 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	o w	o 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

Confi	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	

Heating

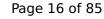
	EN 14511-2	
	Low temperature	Medium temperature
Heat output	11.50 kW	9.86 kW
El input	2.45 kW	3.52 kW
СОР	4.70	2.80

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



	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)

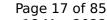
EN 14825			
		Low temperature	Medium temperature
Pdesignh	8.90 kW		
η_{s}	160 %	113 %	
Prated	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.15 kW	7.84 kW	
COP Tj = -7°C	2.88	1.93	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.17 kW	5.54 kW	
COP Tj = +2°C	3.93	2.76	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.99 kW	9.25 kW	
$COPTj = +7^{\circ}C$	5.31	3.89	





	1	
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
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	2.75 kW	1.84 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	19044 kWh	18303 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-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
СОР	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



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)

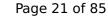
EN 14825			
		Low temperature	Medium temperature
Pdesignh	8.90 kW		
η_{s}	160 %	113 %	
Prated	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.15 kW	7.84 kW	
COP Tj = -7°C	2.88	1.93	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	6.17 kW	5.54 kW	
$COP Tj = +2^{\circ}C$	3.93	2.76	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	5.99 kW	9.25 kW	
$COP Tj = +7^{\circ}C$	5.31	3.89	





	1	
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
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	2.75 kW	1.84 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	19044 kWh	18303 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-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

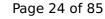
	EN 14511-2		
	Low temperature	Medium temperature	
Heat output	11.50 kW	9.86 kW	
El input	2.45 kW	3.52 kW	
СОР	4.70	2.80	

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



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)

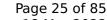
EN 14825			
		Low temperature	Medium temperature
Pdesignh	8.90 kW		
η_{s}	160 %	113 %	
Prated	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.15 kW	7.84 kW	
COP Tj = -7°C	2.88	1.93	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	6.17 kW	5.54 kW	
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Cdh Tj = +2 °C	0.99	0.99	
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Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	7.44 kW	6.77 kW
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WTOL	55 °C	55 °C
Poff	15 W	15 W
РТО	o w	o w
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.75 kW	1.84 kW
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Annual energy consumption Qhe	19044 kWh	18303 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-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	

Heating

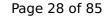
	EN 14511-2		
	Low temperature	Medium temperature	
Heat output	11.50 kW	9.86 kW	
El input	2.45 kW	3.52 kW	
СОР	4.70	2.80	

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



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)

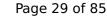
EN 14825			
		Low temperature	Medium temperature
Pdesignh	8.90 kW		
η_{s}	160 %	113 %	
Prated	9.20 kW	8.90 kW	
SCOP	4.08	2.90	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.15 kW	7.84 kW	
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Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	5.99 kW	9.25 kW	
$COP Tj = +7^{\circ}C$	5.31	3.89	





	1	
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
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	2.75 kW	1.84 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	19044 kWh	18303 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-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

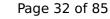
EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	11.82 kW
El input	2.89 kW	4.23 kW
СОР	4.67	2.80

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	10.70 kW		-
η_{s}	160 %	117 %	
Prated	9.90 kW	10.70 kW	_
SCOP	4.08	3.00	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.73 kW	9.44 kW	
$COP Tj = -7^{\circ}C$	2.86	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.34 kW	6.11 kW	
$COPTj = +2^{\circ}C$	3.92	2.82	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.99 kW	9.33 kW	
$COP Tj = +7^{\circ}C$	5.31	4.03	





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	o w	o 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

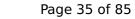
EN 14511-2		
Low temperature Medium temperature		
Heat output	13.50 kW	11.82 kW
El input	2.89 kW	4.23 kW
СОР	4.67	2.80

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



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	10.70 kW		-
η_{s}	160 %	117 %	
Prated	9.90 kW	10.70 kW	_
SCOP	4.08	3.00	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.73 kW	9.44 kW	
$COP Tj = -7^{\circ}C$	2.86	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	6.34 kW	6.11 kW	
$COP Tj = +2^{\circ}C$	3.92	2.82	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.99 kW	9.33 kW	
$COP Tj = +7^{\circ}C$	5.31	4.03	





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	o w	o 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

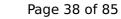
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	13.50 kW	11.82 kW	
El input	2.89 kW	4.23 kW	
СОР	4.67	2.80	

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



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	10.70 kW		-
η_{s}	160 %	117 %	
Prated	9.90 kW	10.70 kW	_
SCOP	4.08	3.00	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.73 kW	9.44 kW	
$COP Tj = -7^{\circ}C$	2.86	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.34 kW	6.11 kW	
$COPTj = +2^{\circ}C$	3.92	2.82	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.99 kW	9.33 kW	
$COP Tj = +7^{\circ}C$	5.31	4.03	





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	o w	o 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

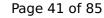
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	13.50 kW	11.82 kW	
El input	2.89 kW	4.23 kW	
СОР	4.67	2.80	

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



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	10.70 kW		
η_{s}	160 %	117 %	
Prated	9.90 kW	10.70 kW	_
SCOP	4.08	3.00	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.73 kW	9.44 kW	
$COP Tj = -7^{\circ}C$	2.86	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.34 kW	6.11 kW	
$COP Tj = +2^{\circ}C$	3.92	2.82	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.99 kW	9.33 kW	
$COP Tj = +7^{\circ}C$	5.31	4.03	





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	o w	o w
PSB	0 W	0 W
PCK	o w	o 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	

Heating

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



	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	10.70 kW		
η_{s}	160 %	117 %	
Prated	9.90 kW	10.70 kW	_
SCOP	4.08	3.00	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.73 kW	9.44 kW	
$COP Tj = -7^{\circ}C$	2.86	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.34 kW	6.11 kW	
$COP Tj = +2^{\circ}C$	3.92	2.82	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.99 kW	9.33 kW	
$COP Tj = +7^{\circ}C$	5.31	4.03	





This information was generated by the HP KEYMARK database on $1\overset{\circ}{8}$ Mar 2022

	1	
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
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	0.00 kW	0.00 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	20384 kWh	22040 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-M-E 111.A14

Со	nfigure 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
СОР	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



	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	10.70 kW		
η_{s}	160 %	117 %	
Prated	9.90 kW	10.70 kW	_
SCOP	4.08	3.00	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.73 kW	9.44 kW	
$COP Tj = -7^{\circ}C$	2.86	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.34 kW	6.11 kW	
$COP Tj = +2^{\circ}C$	3.92	2.82	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.99 kW	9.33 kW	
$COP Tj = +7^{\circ}C$	5.31	4.03	





	1	
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
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	2.41 kW	3.86 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	20384 kWh	22040 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-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	

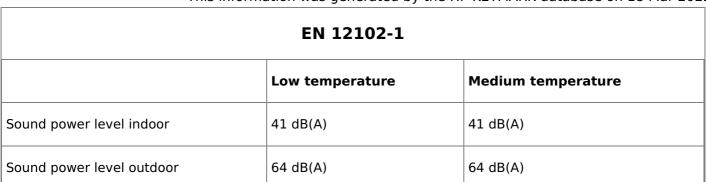
General Data		
Power supply 1x230V 50Hz		

Heating

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

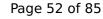
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	





CEN heat pump

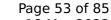
EN 14825			
		Low temperature	Medium temperature
Pdesignh	10.70 kW		
η_s	160 %	117 %	
Prated	9.90 kW	10.70 kW	
SCOP	4.08	3.00	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.73 kW	9.44 kW	
COP Tj = -7°C	2.86	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.34 kW	6.11 kW	
COP Tj = +2°C	3.92	2.82	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	5.99 kW	9.33 kW	
$COP Tj = +7^{\circ}C$	5.31	4.03	





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
COP Ti = 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
COP Tj = TOL or COP Tj = Tdesignh if TOL < 2.42 1.72 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 2.41 kW 3.86 kW
Backup Heater 0.00 kW
Annual energy consumption Qhe 20384 kWh 22040 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-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

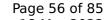
EN 14511-2			
Low temperature Medium temperature			
Heat output	13.50 kW	11.82 kW	
El input	2.89 kW	4.23 kW	
СОР	4.67	2.80	

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



	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)

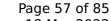
	EN 14825		
		Low temperature	Medium temperature
Pdesignh	10.70 kW		
η_{s}	160 %	117 %	
Prated	9.90 kW	10.70 kW	
SCOP	4.08	3.00	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.73 kW	9.44 kW	
COP Tj = -7°C	2.86	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.34 kW	6.11 kW	
$COP Tj = +2^{\circ}C$	3.92	2.82	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7$ °C	5.99 kW	9.33 kW	
$COP Tj = +7^{\circ}C$	5.31	4.03	





	1	
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
РТО	0 W	o w
PSB	0 W	o w
РСК	o w	o 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)





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-M 101.A16

Con	figure 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
СОР	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



	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	11.80 kW		
η_{s}	155 %	119 %	
Prated	10.00 kW	11.80 kW	_
SCOP	3.95	3.05	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.85 kW	10.45 kW	
$COP Tj = -7^{\circ}C$	2.54	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.60 kW	6.65 kW	
$COPTj = +2^{\circ}C$	3.76	2.86	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.93 kW	9.42 kW	
$COP Tj = +7^{\circ}C$	5.40	4.13	





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	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	2.56 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)	
Jnits Indoor + Outdoor		
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Heating

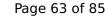
EN 14511-2			
Low temperature Medium temperature			
Heat output	15.50 kW	13.43 kW	
El input	3.42 kW	4.94 kW	
СОР	4.53	2.72	

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



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	11.80 kW		'
η_{s}	155 %	119 %	
Prated	10.00 kW	11.80 kW	
SCOP	3.95	3.05	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.85 kW	10.45 kW	
COP Tj = -7°C	2.54	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	6.60 kW	6.65 kW	
COP Tj = +2°C	3.76	2.86	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7$ °C	5.93 kW	9.42 kW	
$COP Tj = +7^{\circ}C$	5.40	4.13	





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	o w	o w
PSB	0 W	0 W
PCK	0 W	o 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)	
nits 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	
СОР	4.53	2.72	

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	11.80 kW		-
η_{s}	155 %	119 %	
Prated	10.00 kW	11.80 kW	_
SCOP	3.95	3.05	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.85 kW	10.45 kW	
$COP Tj = -7^{\circ}C$	2.54	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.60 kW	6.65 kW	
$COPTj = +2^{\circ}C$	3.76	2.86	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.93 kW	9.42 kW	
$COP Tj = +7^{\circ}C$	5.40	4.13	





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	o w	o w
PSB	0 W	0 W
PCK	0 W	o 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	
СОР	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	



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	11.80 kW		-
η_{s}	155 %	119 %	
Prated	10.00 kW	11.80 kW	_
SCOP	3.95	3.05	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.85 kW	10.45 kW	
$COP Tj = -7^{\circ}C$	2.54	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.60 kW	6.65 kW	
$COPTj = +2^{\circ}C$	3.76	2.86	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.93 kW	9.42 kW	
$COP Tj = +7^{\circ}C$	5.40	4.13	





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	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	2.56 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	

Heating

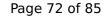
EN 14511-2			
Low temperature Medium temperature			
Heat output	15.50 kW	13.43 kW	
El input	3.42 kW	4.94 kW	
СОР	4.53	2.72	

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)		

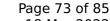
EN 14825				
		Low temperature	Medium temperature	
Pdesignh	11.80 kW		'	
η_{s}	155 %	119 %		
Prated	10.00 kW	11.80 kW		
SCOP	3.95	3.05		
Tbiv	-7 °C	-7 °C		
TOL	-20 °C	-20 °C		
Pdh Tj = -7°C	8.85 kW	10.45 kW		
COP Tj = -7°C	2.54	2.05		
Cdh Tj = -7 °C	0.99	0.99		
Pdh Tj = $+2$ °C	6.60 kW	6.65 kW		
COP Tj = +2°C	3.76	2.86		
Cdh Tj = +2 °C	0.99	0.99		
Pdh Tj = $+7^{\circ}$ C	5.93 kW	9.42 kW		
$COP Tj = +7^{\circ}C$	5.40	4.13		





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	
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	2.56 kW	4.00 kW	
Backup Heater	0.00 kW		
Annual energy consumption Qhe	24394 kWh	24394 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-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	
СОР	4.53	2.72	

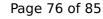
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



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	11.80 kW		
η_{s}	155 %	119 %	
Prated	10.00 kW	11.80 kW	_
SCOP	3.95	3.05	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.85 kW	10.45 kW	
$COP Tj = -7^{\circ}C$	2.54	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.60 kW	6.65 kW	
$COPTj = +2^{\circ}C$	3.76	2.86	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.93 kW	9.42 kW	
$COP Tj = +7^{\circ}C$	5.40	4.13	

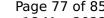
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Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.93 kW	6.77 kW
COP Tj = 12°C	6.49	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.85 kW	10.45 kW
COP Tj = Tbiv	2.54	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.44 kW	7.81 kW
COP Tj = TOL or COP 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
РТО	o w	o w
PSB	o w	o w
PCK	0 W	o 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)





 $$\operatorname{\textit{Page}}\xspace$ 77 of 85 This information was generated by the HP KEYMARK database on 18 Mar 2022

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-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	
СОР	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



	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	11.80 kW		,
η_{s}	155 %	119 %	
Prated	10.00 kW	11.80 kW	
SCOP	3.95	3.05	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.85 kW	10.45 kW	
$COP Tj = -7^{\circ}C$	2.54	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.60 kW	6.65 kW	
$COP Tj = +2^{\circ}C$	3.76	2.86	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.93 kW	9.42 kW	
$COP Tj = +7^{\circ}C$	5.40	4.13	

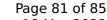
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	1	
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.93 kW	6.77 kW
COP Tj = 12°C	6.49	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.85 kW	10.45 kW
COP Tj = Tbiv	2.54	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	7.44 kW	7.81 kW
COP Tj = TOL 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
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	2.56 kW	4.00 kW
Backup Heater	0.00 kW	
Annual energy consumption Qhe	24394 kWh	24394 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-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
СОР	4.53	2.72

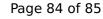
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



	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	11.80 kW		-
η_{s}	155 %	119 %	
Prated	10.00 kW	11.80 kW	_
SCOP	3.95	3.05	
Tbiv	-7 °C	-7 °C	
TOL	-20 °C	-20 °C	
Pdh Tj = -7°C	8.85 kW	10.45 kW	
$COP Tj = -7^{\circ}C$	2.54	2.05	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = +2°C	6.60 kW	6.65 kW	
$COP Tj = +2^{\circ}C$	3.76	2.86	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = +7°C	5.93 kW	9.42 kW	
$COP Tj = +7^{\circ}C$	5.40	4.13	

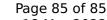
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Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	14.93 kW	6.77 kW
COP Tj = 12°C	6.49	5.44
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	8.85 kW	10.45 kW
COP Tj = Tbiv	2.54	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.44 kW	7.81 kW
COP Tj = TOL or COP 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
РТО	o w	o w
PSB	o w	o w
PCK	0 W	o 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)





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