

Subtype Vitocal 100-S/111-S | 12-16kW 400V

Certificate Holder	Viessmann Climate Solutions GmbH & Co. KG
Address	Viessmannstr. 1
ZIP	35107
City	Allendorf/Eder
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Vitocal 100-S/111-S 12-16kW 400V
Registration number	011-1W0404
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

Model name	Vitocal 100-S AWB 101.A12
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.50 kW	9.72 kW
El input	2.58 kW	3.65 kW
COP	4.45	2.66

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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°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
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
Annual energy consumption Qhe	4696 kWh	6362 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
COP Tj = +2°C	3.50	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
COP Tj = +2°C	1.93	
Cdh Tj = +2 °C	0.99	

EN 14825 | Average Climate

Pdesignh	8.80 kW	
Backup Heater	0.00 kW	

Model Vitocal 100-S AWB-E 101.A12

Model name	Vitocal 100-S AWB-E 101.A12
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.50 kW	9.72 kW
El input	2.58 kW	3.65 kW
COP	4.45	2.66

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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°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
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
Annual energy consumption Qhe	4696 kWh	6362 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
COP Tj = +2°C	3.50	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
COP Tj = +2°C	1.93	
Cdh Tj = +2 °C	0.99	

EN 14825 | Average Climate

Pdesignh	8.80 kW	
Backup Heater	0.00 kW	

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

Model name	Vitocal 100-S AWB-E-AC 101.A12
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.50 kW	9.72 kW
El input	2.58 kW	3.65 kW
COP	4.45	2.66

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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°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
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
Annual energy consumption Qhe	4696 kWh	6362 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
COP Tj = +2°C	3.50	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
COP Tj = +2°C	1.93	
Cdh Tj = +2 °C	0.99	

EN 14825 | Average Climate

Pdesignh	8.80 kW	
Backup Heater	0.00 kW	

Model Vitocal 111-S AWBT-AC 111.A12

Model name	Vitocal 111-S AWBT-AC 111.A12
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 16147 | Average Climate

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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.50 kW	9.72 kW
El input	2.58 kW	3.65 kW
COP	4.45	2.66

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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	
Pdh Tj = +7°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
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
Annual energy consumption Qhe	4696 kWh	6362 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
COP Tj = +2°C	3.50	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
COP Tj = +2°C	1.93	
Cdh Tj = +2 °C	0.99	

EN 14825 | Average Climate

Pdesignh	8.80 kW	
Backup Heater	0.00 kW	

Model Vitocal 111-S AWBT-E 111.A12

Model name	Vitocal 111-S AWBT-E 111.A12
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 16147 | Average Climate

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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.50 kW	9.72 kW
El input	2.58 kW	3.65 kW
COP	4.45	2.66

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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°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
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
Annual energy consumption Qhe	4696 kWh	6362 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
COP Tj = +2°C	3.50	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
COP Tj = +2°C	1.93	
Cdh Tj = +2 °C	0.99	

EN 14825 | Average Climate

Pdesignh	8.80 kW	
Backup Heater	0.00 kW	

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

Model name	Vitocal 111-S AWBT-E-AC 111.A12
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 16147 | Average Climate

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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.50 kW	9.72 kW
El input	2.58 kW	3.65 kW
COP	4.45	2.66

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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°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
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
Annual energy consumption Qhe	4696 kWh	6362 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
COP Tj = +2°C	3.50	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
COP Tj = +2°C	1.93	
Cdh Tj = +2 °C	0.99	

EN 14825 | Average Climate

Pdesignh	8.80 kW	
Backup Heater	0.00 kW	

Model Vitocal 100-S AWB 101.A14

Model name	Vitocal 100-S AWB 101.A14
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	13.50 kW	11.61 kW
El input	3.00 kW	4.38 kW
COP	4.50	2.81

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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°C	5.97 kW	8.12 kW
COP Tj = +7°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
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	2.13 kW
Annual energy consumption Qhe	18488 kWh	20328 kWh
EN 14825 Average Climate		
Pdesignh	9.80 kW	
Backup Heater	0.00 kW	

Model Vitocal 100-S AWB-E 101.A14

Model name	Vitocal 100-S AWB-E 101.A14
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	13.50 kW	11.61 kW
El input	3.00 kW	4.38 kW
COP	4.50	2.81

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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°C	5.97 kW	8.12 kW
COP Tj = +7°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
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	2.13 kW
Annual energy consumption Qhe	18488 kWh	20328 kWh
EN 14825 Average Climate		
Pdesignh	9.80 kW	
Backup Heater	0.00 kW	

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

Model name	Vitocal 100-S AWB-E-AC 101.A14
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	13.50 kW	11.61 kW
El input	3.00 kW	4.38 kW
COP	4.50	2.81

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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°C	5.97 kW	8.12 kW
COP Tj = +7°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
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	2.13 kW
Annual energy consumption Qhe	18488 kWh	20328 kWh
EN 14825 Average Climate		
Pdesignh	9.80 kW	
Backup Heater	0.00 kW	

Model Vitocal 111-S AWBT-AC 111.A14

Model name	Vitocal 111-S AWBT-AC 111.A14
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 16147 | Average Climate

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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	13.50 kW	11.61 kW
El input	3.00 kW	4.38 kW
COP	4.50	2.81

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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°C	5.97 kW	8.12 kW
COP Tj = +7°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
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	2.13 kW
Annual energy consumption Qhe	18488 kWh	20328 kWh
EN 14825 Average Climate		
Pdesignh	9.80 kW	
Backup Heater	0.00 kW	

Model Vitocal 111-S AWBT-E 111.A14

Model name	Vitocal 111-S AWBT-E 111.A14
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 16147 | Average Climate

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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	13.50 kW	11.61 kW
El input	3.00 kW	4.38 kW
COP	4.50	2.81

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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°C	5.97 kW	8.12 kW
COP Tj = +7°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
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	2.13 kW
Annual energy consumption Qhe	18488 kWh	20328 kWh
EN 14825 Average Climate		
Pdesignh	9.80 kW	
Backup Heater	0.00 kW	

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

Model name	Vitocal 111-S AWBT-E-AC 111.A14
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 16147 | Average Climate

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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	13.50 kW	11.61 kW
El input	3.00 kW	4.38 kW
COP	4.50	2.81

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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°C	5.97 kW	8.12 kW
COP Tj = +7°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
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	2.13 kW
Annual energy consumption Qhe	18488 kWh	20328 kWh
EN 14825 Average Climate		
Pdesignh	9.80 kW	
Backup Heater	0.00 kW	

Model Vitocal 100-S AWB 101.A16

Model name	Vitocal 100-S AWB 101.A16
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	15.74 kW	12.67 kW
El input	3.60 kW	4.95 kW
COP	4.37	2.62

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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	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	2.12 kW	1.32 kW
Annual energy consumption Qhe	26449 kWh	22384 kWh
EN 14825 Average Climate		
Pdesignh	10.80 kW	
Backup Heater	0.00 kW	

Model Vitocal 100-S AWB-E 101.A16

Model name	Vitocal 100-S AWB-E 101.A16
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	15.74 kW	12.67 kW
El input	3.60 kW	4.95 kW
COP	4.37	2.62

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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	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	2.12 kW	1.32 kW
Annual energy consumption Qhe	26449 kWh	22384 kWh
EN 14825 Average Climate		
Pdesignh	10.80 kW	
Backup Heater	0.00 kW	

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

Model name	Vitocal 100-S AWB-E-AC 101.A16
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	15.74 kW	12.67 kW
El input	3.60 kW	4.95 kW
COP	4.37	2.62

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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	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	2.12 kW	1.32 kW
Annual energy consumption Qhe	26449 kWh	22384 kWh
EN 14825 Average Climate		
Pdesignh	10.80 kW	
Backup Heater	0.00 kW	

Model Vitocal 111-S AWBT-AC 111.A16

Model name	Vitocal 111-S AWBT-AC 111.A16
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 16147 | Average Climate

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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	15.74 kW	12.67 kW
El input	3.60 kW	4.95 kW
COP	4.37	2.62

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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	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	2.12 kW	1.32 kW
Annual energy consumption Qhe	26449 kWh	22384 kWh
EN 14825 Average Climate		
Pdesignh	10.80 kW	
Backup Heater	0.00 kW	

Model Vitocal 111-S AWBT-E 111.A16

Model name	Vitocal 111-S AWBT-E 111.A16
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 16147 | Average Climate

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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	15.74 kW	12.67 kW
El input	3.60 kW	4.95 kW
COP	4.37	2.62

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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	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	2.12 kW	1.32 kW
Annual energy consumption Qhe	26449 kWh	22384 kWh
EN 14825 Average Climate		
Pdesignh	10.80 kW	
Backup Heater	0.00 kW	

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

Model name	Vitocal 111-S AWBT-E-AC 111.A16
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	Yes

Outdoor Air/Water

EN 16147 | Average Climate

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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	15.74 kW	12.67 kW
El input	3.60 kW	4.95 kW
COP	4.37	2.62

EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
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