

## Subtype Vitocal 2xx-S ODU1

Certificate Holder	Viessmann Climate Solutions SE
Address	Viessmannstr. 1
ZIP	35107
City	Allendorf/Eder
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Vitocal 2xx-S ODU1
Registration number	011-1W0199
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	1.8 kg
Certification Date	15.03.2018
Testing basis	HP KEYMARK certification scheme rules rev. 7

## Model Vitocal 200-S AWB-M-E-AC 201.D04

Model name	Vitocal 200-S AWB-M-E-AC 201.D04
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	173 %	124 %
Prated	5.38 kW	5.23 kW
SCOP	4.4	3.18
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.76 kW	4.63 kW
COP Tj = -7°C	2.86	2.03
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	4.33	3.07
Pdh Tj = +7°C	3.15 kW	2.97 kW
COP Tj = +7°C	5.77	4.19
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.14	5.50
Pdh Tj = Tbiv	4.76 kW	4.63 kW
COP Tj = Tbiv	2.86	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.33 kW	4.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.86

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	0.86 kW
Annual energy consumption Qhe	2524 kWh	3292 kWh

## Model Vitocal 200-S AWB-M-E-AC 201.D06

Model name	Vitocal 200-S AWB-M-E-AC 201.D06
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	172 %	125 %
Prated	5.59 kW	5.59 kW
SCOP	4.38	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.95 kW	4.95 kW
COP Tj = -7°C	2.83	2.03
Pdh Tj = +2°C	3.00 kW	3.30 kW
COP Tj = +2°C	4.33	3.11
Pdh Tj = +7°C	3.15 kW	2.97 kW
COP Tj = +7°C	5.81	4.22
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.20	5.51
Pdh Tj = Tbiv	4.95 kW	4.95 kW
COP Tj = Tbiv	2.83	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.49 kW	4.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.85

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.13 kW	0.94 kW
Annual energy consumption Qhe	2637 kWh	3605 kWh

## Model Vitocal 200-S AWB-M 201.D04

Model name	Vitocal 200-S AWB-M 201.D04
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	173 %	124 %
Prated	5.38 kW	5.23 kW
SCOP	4.4	3.18
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.76 kW	4.63 kW
COP Tj = -7°C	2.86	2.03
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	4.33	3.07
Pdh Tj = +7°C	3.15 kW	2.97 kW
COP Tj = +7°C	5.77	4.19
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.14	5.50
Pdh Tj = Tbiv	4.76 kW	4.63 kW
COP Tj = Tbiv	2.86	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.33 kW	4.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.86

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	0.86 kW
Annual energy consumption Qhe	2524 kWh	3292 kWh

## Model Vitocal 200-S AWB-M 201.D06

Model name	Vitocal 200-S AWB-M 201.D06
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	172 %	125 %
Prated	5.59 kW	5.59 kW
SCOP	4.38	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.95 kW	4.95 kW
COP Tj = -7°C	2.83	2.03
Pdh Tj = +2°C	3.00 kW	3.30 kW
COP Tj = +2°C	4.33	3.11
Pdh Tj = +7°C	3.15 kW	2.97 kW
COP Tj = +7°C	5.81	4.22
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.20	5.51
Pdh Tj = Tbiv	4.95 kW	4.95 kW
COP Tj = Tbiv	2.83	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.49 kW	4.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.85



Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.13 kW	0.94 kW
Annual energy consumption Qhe	2637 kWh	3605 kWh

## Model Vitocal 200-S AWB-E-M 201.D04

Model name	Vitocal 200-S AWB-E-M 201.D04
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	173 %	124 %
Prated	5.38 kW	5.23 kW
SCOP	4.4	3.18
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.76 kW	4.63 kW
COP Tj = -7°C	2.86	2.03
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	4.33	3.07
Pdh Tj = +7°C	3.15 kW	2.97 kW
COP Tj = +7°C	5.77	4.19
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.14	5.50
Pdh Tj = Tbiv	4.76 kW	4.63 kW
COP Tj = Tbiv	2.86	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.33 kW	4.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.86

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	0.86 kW
Annual energy consumption Qhe	2524 kWh	3292 kWh

## Model Vitocal 200-S AWB-E-M 201.D06

Model name	Vitocal 200-S AWB-E-M 201.D06
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	172 %	125 %
Prated	5.59 kW	5.59 kW
SCOP	4.38	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.95 kW	4.95 kW
COP Tj = -7°C	2.83	2.03
Pdh Tj = +2°C	3.00 kW	3.30 kW
COP Tj = +2°C	4.33	3.11
Pdh Tj = +7°C	3.15 kW	2.97 kW
COP Tj = +7°C	5.81	4.22
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.20	5.51
Pdh Tj = Tbiv	4.95 kW	4.95 kW
COP Tj = Tbiv	2.83	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.49 kW	4.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.85

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.13 kW	0.94 kW
Annual energy consumption Qhe	2637 kWh	3447 kWh

## Model Vitocal 222-S AWBT-M 221.C04

Model name	Vitocal 222-S AWBT-M 221.C04
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

### General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	176 %	126 %
Prated	5.21 kW	5.4 kW
SCOP	4.49	3.22
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.61 kW	4.78 kW
COP Tj = -7°C	2.87	2.02
Pdh Tj = +2°C	3.42 kW	3.17 kW
COP Tj = +2°C	4.50	3.16
Pdh Tj = +7°C	3.17 kW	2.97 kW
COP Tj = +7°C	5.76	4.18
Pdh Tj = 12°C	2.95 kW	2.80 kW
COP Tj = 12°C	6.95	5.35
Pdh Tj = Tbiv	4.61 kW	4.78 kW
COP Tj = Tbiv	2.87	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.12 kW	2.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.02

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	0.86 kW
Annual energy consumption Qhe	2524 kWh	3292 kWh

## Model Vitocal 222-S AWBT-M 221.C06

Model name	Vitocal 222-S AWBT-M 221.C06
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

### General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	172 %	125 %
Prated	5.59 kW	5.59 kW
SCOP	4.38	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.95 kW	4.95 kW
COP Tj = -7°C	2.83	2.03
Pdh Tj = +2°C	3.00 kW	3.30 kW
COP Tj = +2°C	4.33	3.11
Pdh Tj = +7°C	3.15 kW	2.97 kW
COP Tj = +7°C	5.81	4.22
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.20	5.51
Pdh Tj = Tbiv	4.95 kW	4.95 kW
COP Tj = Tbiv	2.83	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.49 kW	4.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.85



Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.13 kW	0.94 kW
Annual energy consumption Qhe	2569 kWh	3447 kWh

## Model Vitocal 222-S AWBT-M-E-AC 221.C04

Model name	Vitocal 222-S AWBT-M-E-AC 221.C04
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

### General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	173 %	124 %
Prated	5.38 kW	5.23 kW
SCOP	4.4	3.18
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.76 kW	4.63 kW
COP Tj = -7°C	2.86	2.03
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	4.33	3.07
Pdh Tj = +7°C	3.15 kW	2.97 kW
COP Tj = +7°C	5.77	4.19
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.14	5.50
Pdh Tj = Tbiv	4.76 kW	4.63 kW
COP Tj = Tbiv	2.86	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.33 kW	4.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.86

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	0.86 kW
Annual energy consumption Qhe	2524 kWh	3292 kWh

## Model Vitocal 222-S AWBT-M-E-AC 221.C06

Model name	Vitocal 222-S AWBT-M-E-AC 221.C06
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

### General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	172 %	125 %
Prated	5.59 kW	5.59 kW
SCOP	4.38	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.95 kW	4.95 kW
COP Tj = -7°C	2.83	2.03
Pdh Tj = +2°C	3.00 kW	3.30 kW
COP Tj = +2°C	4.33	3.11
Pdh Tj = +7°C	3.15 kW	2.97 kW
COP Tj = +7°C	5.81	4.22
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.20	5.51
Pdh Tj = Tbiv	4.95 kW	4.95 kW
COP Tj = Tbiv	2.83	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.49 kW	4.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.85

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.13 kW	0.94 kW
Annual energy consumption Qhe	2637 kWh	3605 kWh

## Model Vitocal 222-S AWBT-M-E 221.C04

Model name	Vitocal 222-S AWBT-M-E 221.C04
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

### General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	173 %	124 %
Prated	5.38 kW	5.23 kW
SCOP	4.4	3.18
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.76 kW	4.63 kW
COP Tj = -7°C	2.86	2.03
Pdh Tj = +2°C	3.00 kW	3.11 kW
COP Tj = +2°C	4.33	3.07
Pdh Tj = +7°C	3.15 kW	2.97 kW
COP Tj = +7°C	5.77	4.19
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.14	5.50
Pdh Tj = Tbiv	4.76 kW	4.63 kW
COP Tj = Tbiv	2.86	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.33 kW	4.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.86

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.98
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	0.86 kW
Annual energy consumption Qhe	2524 kWh	3292 kWh

## Model Vitocal 222-S AWBT-M-E 221.C06

Model name	Vitocal 222-S AWBT-M-E 221.C06
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

### General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	172 %	125 %
Prated	5.59 kW	5.59 kW
SCOP	4.38	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.95 kW	4.95 kW
COP Tj = -7°C	2.83	2.03
Pdh Tj = +2°C	3.00 kW	3.30 kW
COP Tj = +2°C	4.33	3.11
Pdh Tj = +7°C	3.15 kW	2.97 kW
COP Tj = +7°C	5.81	4.22
Pdh Tj = 12°C	3.05 kW	2.91 kW
COP Tj = 12°C	7.20	5.51
Pdh Tj = Tbiv	4.95 kW	4.95 kW
COP Tj = Tbiv	2.83	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.49 kW	4.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.85



Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	0 W	0 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.13 kW	0.94 kW
Annual energy consumption Qhe	2637 kWh	3605 kWh