

Subtype Vitocal 2xx-S ODU4

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 2xx-S ODU4
Registration number	011-1W0202
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	3.6 kg

**Model Vitocal 200-S AWB-E-AC 201.D10**

Model name	Vitocal 200-S AWB-E-AC 201.D10
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	7.58 kW	7.89 kW
El input	1.51 kW	2.67 kW
COP	5.01	2.96

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	132 %
Prated	9.75 kW	9.67 kW
SCOP	4.58	3.37
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.63 kW	8.56 kW
COP Tj = -7°C	3.27	2.28
Pdh Tj = +2°C	5.34 kW	5.48 kW
COP Tj = +2°C	4.34	3.19
Pdh Tj = +7°C	6.63 kW	6.30 kW
COP Tj = +7°C	5.98	4.43
Pdh Tj = 12°C	6.85 kW	6.61 kW
COP Tj = 12°C	7.81	5.86

Pdh Tj = Tbiv	8.63 kW	8.56 kW
COP Tj = Tbiv	3.27	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.87 kW	8.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.93	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	24 W	24 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.93 kW	1.40 kW
Annual energy consumption Qhe	4398 kWh	5933 kWh

**Model Vitocal 200-S AWB-E-AC 201.D13**

Model name	Vitocal 200-S AWB-E-AC 201.D13
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	8.88 kW	8.44 kW
El input	1.78 kW	2.80 kW
COP	4.99	3.01

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	10.99 kW	11.00 kW
SCOP	4.64	3.42
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.73 kW	9.73 kW
COP Tj = -7°C	3.16	2.28
Pdh Tj = +2°C	5.98 kW	5.87 kW
COP Tj = +2°C	4.46	3.28
Pdh Tj = +7°C	6.86 kW	6.53 kW
COP Tj = +7°C	6.05	4.50
Pdh Tj = 12°C	6.87 kW	6.61 kW
COP Tj = 12°C	7.91	5.90

Pdh Tj = Tbiv	9.73 kW	9.73 kW
COP Tj = Tbiv	3.16	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.86 kW	9.47 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	31 W	31 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.19 kW	1.59 kW
Annual energy consumption Qhe	4898 kWh	6658 kWh

**Model Vitocal 200-S AWB-E-AC 201.D16**

Model name	Vitocal 200-S AWB-E-AC 201.D16
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	10.11 kW	9.16 kW
El input	2.04 kW	3.05 kW
COP	4.95	3.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	11.65 kW	11.98 kW
SCOP	4.62	3.42
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	10.30 kW	10.60 kW
COP Tj = -7°C	3.09	2.32
Pdh Tj = +2°C	6.41 kW	6.25 kW
COP Tj = +2°C	4.49	3.34
Pdh Tj = +7°C	7.27 kW	6.78 kW
COP Tj = +7°C	5.94	4.54
Pdh Tj = 12°C	6.88 kW	6.63 kW
COP Tj = 12°C	7.94	5.98

Pdh Tj = Tbiv	10.30 kW	10.60 kW
COP Tj = Tbiv	3.09	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.39 kW	9.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	40 W	40 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.31 kW	2.13 kW
Annual energy consumption Qhe	5210 kWh	7248 kWh

**Model Vitocal 200-S AWB 201.D10**

Model name	Vitocal 200-S AWB 201.D10
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	7.58 kW	7.89 kW
El input	1.51 kW	2.67 kW
COP	5.01	2.96

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	132 %
Prated	9.75 kW	9.67 kW
SCOP	4.58	3.37
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.63 kW	8.56 kW
COP Tj = -7°C	3.27	2.28
Pdh Tj = +2°C	5.34 kW	5.48 kW
COP Tj = +2°C	4.34	3.19
Pdh Tj = +7°C	6.63 kW	6.30 kW
COP Tj = +7°C	5.98	4.43
Pdh Tj = 12°C	6.85 kW	6.61 kW
COP Tj = 12°C	7.81	5.86

Pdh Tj = Tbiv	8.63 kW	8.56 kW
COP Tj = Tbiv	3.27	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.87 kW	8.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.93	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	24 W	24 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.93 kW	1.40 kW
Annual energy consumption Qhe	4398 kWh	5933 kWh

**Model Vitocal 200-S AWB 201.D13**

Model name	Vitocal 200-S AWB 201.D13
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	8.88 kW	8.44 kW
El input	1.78 kW	2.80 kW
COP	4.99	3.01

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	10.99 kW	11.00 kW
SCOP	4.64	3.42
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.73 kW	9.73 kW
COP Tj = -7°C	3.16	2.28
Pdh Tj = +2°C	5.98 kW	5.87 kW
COP Tj = +2°C	4.46	3.28
Pdh Tj = +7°C	6.86 kW	6.53 kW
COP Tj = +7°C	6.05	4.50
Pdh Tj = 12°C	6.87 kW	6.61 kW
COP Tj = 12°C	7.91	5.90

Pdh Tj = Tbiv	9.73 kW	9.73 kW
COP Tj = Tbiv	3.16	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.86 kW	9.47 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	31 W	31 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.19 kW	1.59 kW
Annual energy consumption Qhe	4898 kWh	6652 kWh

**Model Vitocal 200-S AWB 201.D16**

Model name	Vitocal 200-S AWB 201.D16
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	10.11 kW	9.16 kW
El input	2.04 kW	3.05 kW
COP	4.95	3.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	11.65 kW	11.98 kW
SCOP	4.62	3.42
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	10.30 kW	10.60 kW
COP Tj = -7°C	3.09	2.32
Pdh Tj = +2°C	6.41 kW	6.25 kW
COP Tj = +2°C	4.49	3.34
Pdh Tj = +7°C	7.27 kW	6.78 kW
COP Tj = +7°C	5.94	4.54
Pdh Tj = 12°C	6.88 kW	6.63 kW
COP Tj = 12°C	7.94	5.98

Pdh Tj = Tbiv	10.30 kW	10.60 kW
COP Tj = Tbiv	3.09	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.39 kW	9.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	40 W	40 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.31 kW	2.13 kW
Annual energy consumption Qhe	5210 kWh	7248 kWh

**Model Vitocal 200-S AWB-E 201.D10**

Model name	Vitocal 200-S AWB-E 201.D10
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	7.58 kW	7.89 kW
El input	1.51 kW	2.67 kW
COP	5.01	2.96

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	132 %
Prated	9.75 kW	9.67 kW
SCOP	4.58	3.37
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.63 kW	8.56 kW
COP Tj = -7°C	3.27	2.28
Pdh Tj = +2°C	5.34 kW	5.48 kW
COP Tj = +2°C	4.34	3.19
Pdh Tj = +7°C	6.63 kW	6.30 kW
COP Tj = +7°C	5.98	4.43
Pdh Tj = 12°C	6.85 kW	6.61 kW
COP Tj = 12°C	7.81	5.86

Pdh Tj = Tbiv	8.63 kW	8.56 kW
COP Tj = Tbiv	3.27	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.87 kW	8.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.93	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	24 W	24 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.93 kW	1.40 kW
Annual energy consumption Qhe	4398 kWh	5933 kWh

**Model Vitocal 200-S AWB-E 201.D13**

Model name	Vitocal 200-S AWB-E 201.D13
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	8.88 kW	8.44 kW
El input	1.78 kW	2.80 kW
COP	4.99	3.01

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	10.99 kW	11.00 kW
SCOP	4.64	3.42
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.73 kW	9.73 kW
COP Tj = -7°C	3.16	2.28
Pdh Tj = +2°C	5.98 kW	5.87 kW
COP Tj = +2°C	4.46	3.28
Pdh Tj = +7°C	6.86 kW	6.53 kW
COP Tj = +7°C	6.05	4.50
Pdh Tj = 12°C	6.87 kW	6.61 kW
COP Tj = 12°C	7.91	5.90

Pdh Tj = Tbiv	9.73 kW	9.73 kW
COP Tj = Tbiv	3.16	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.86 kW	9.47 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	31 W	31 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.19 kW	1.59 kW
Annual energy consumption Qhe	4898 kWh	6652 kWh

**Model Vitocal 200-S AWB-E 201.D16**

Model name	Vitocal 200-S AWB-E 201.D16
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	3x400V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	10.11 kW	9.16 kW
El input	2.04 kW	3.05 kW
COP	4.95	3.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	11.65 kW	11.98 kW
SCOP	4.62	3.42
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	10.30 kW	10.60 kW
COP Tj = -7°C	3.09	2.32
Pdh Tj = +2°C	6.41 kW	6.25 kW
COP Tj = +2°C	4.49	3.34
Pdh Tj = +7°C	7.27 kW	6.78 kW
COP Tj = +7°C	5.94	4.54
Pdh Tj = 12°C	6.88 kW	6.63 kW
COP Tj = 12°C	7.94	5.98

Pdh Tj = Tbiv	10.30 kW	10.60 kW
COP Tj = Tbiv	3.09	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.39 kW	9.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	40 W	40 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.31 kW	2.13 kW
Annual energy consumption Qhe	5210 kWh	7248 kWh

**Model Vitocal 222-S AWBT 221.C10**

Model name	Vitocal 222-S AWBT 221.C10
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	7.58 kW	7.89 kW
El input	1.51 kW	2.67 kW
COP	5.01	2.96

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	132 %
Prated	9.75 kW	9.67 kW
SCOP	4.58	3.37
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.63 kW	8.56 kW
COP Tj = -7°C	3.27	2.28
Pdh Tj = +2°C	5.34 kW	5.48 kW
COP Tj = +2°C	4.34	3.19
Pdh Tj = +7°C	6.63 kW	6.30 kW
COP Tj = +7°C	5.98	4.43
Pdh Tj = 12°C	6.85 kW	6.61 kW
COP Tj = 12°C	7.81	5.86

Pdh Tj = Tbiv	8.63 kW	8.56 kW
COP Tj = Tbiv	3.27	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.87 kW	8.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.93	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	24 W	24 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.93 kW	1.40 kW
Annual energy consumption Qhe	4398 kWh	5933 kWh

**Model Vitocal 222-S AWBT 221.C13**

Model name	Vitocal 222-S AWBT 221.C13
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	8.88 kW	8.44 kW
El input	1.78 kW	2.80 kW
COP	4.99	3.01

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	10.99 kW	11.00 kW
SCOP	4.64	3.42
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.73 kW	9.73 kW
COP Tj = -7°C	3.16	2.28
Pdh Tj = +2°C	5.98 kW	5.87 kW
COP Tj = +2°C	4.46	3.28
Pdh Tj = +7°C	6.86 kW	6.53 kW
COP Tj = +7°C	6.05	4.50
Pdh Tj = 12°C	6.87 kW	6.61 kW
COP Tj = 12°C	7.91	5.90

Pdh Tj = Tbiv	9.73 kW	9.73 kW
COP Tj = Tbiv	3.16	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.86 kW	9.47 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	31 W	31 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.19 kW	1.59 kW
Annual energy consumption Qhe	4898 kWh	6652 kWh

**Model Vitocal 222-S AWBT 221.C16**

Model name	Vitocal 222-S AWBT 221.C16
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	10.11 kW	9.16 kW
El input	2.04 kW	3.05 kW
COP	4.95	3.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	11.65 kW	11.98 kW
SCOP	4.62	3.42
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	10.30 kW	10.60 kW
COP Tj = -7°C	3.09	2.32
Pdh Tj = +2°C	6.41 kW	6.25 kW
COP Tj = +2°C	4.49	3.34
Pdh Tj = +7°C	7.27 kW	6.78 kW
COP Tj = +7°C	5.94	4.54
Pdh Tj = 12°C	6.88 kW	6.63 kW
COP Tj = 12°C	7.94	5.98

Pdh Tj = Tbiv	10.30 kW	10.60 kW
COP Tj = Tbiv	3.09	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.39 kW	9.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	40 W	40 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.31 kW	2.13 kW
Annual energy consumption Qhe	5210 kWh	7248 kWh

**Model Vitocal 222-S AWBT-E-AC 221.C10**

Model name	Vitocal 222-S AWBT-E-AC 221.C10
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	7.58 kW	7.89 kW
El input	1.51 kW	2.67 kW
COP	5.01	2.96

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	132 %
Prated	9.75 kW	9.67 kW
SCOP	4.58	3.37
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.63 kW	8.56 kW
COP Tj = -7°C	3.27	2.28
Pdh Tj = +2°C	5.34 kW	5.48 kW
COP Tj = +2°C	4.34	3.19
Pdh Tj = +7°C	6.63 kW	6.30 kW
COP Tj = +7°C	5.98	4.43
Pdh Tj = 12°C	6.85 kW	6.61 kW
COP Tj = 12°C	7.81	5.86

Pdh Tj = Tbiv	8.63 kW	8.56 kW
COP Tj = Tbiv	3.27	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.87 kW	8.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.93	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	24 W	24 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.93 kW	1.40 kW
Annual energy consumption Qhe	4398 kWh	5933 kWh

**Model Vitocal 222-S AWBT-E-AC 221.C13**

Model name	Vitocal 222-S AWBT-E-AC 221.C13
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	8.88 kW	8.44 kW
El input	1.78 kW	2.80 kW
COP	4.99	3.01

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	10.99 kW	11.00 kW
SCOP	4.64	3.42
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.73 kW	9.73 kW
COP Tj = -7°C	3.16	2.28
Pdh Tj = +2°C	5.98 kW	5.87 kW
COP Tj = +2°C	4.46	3.28
Pdh Tj = +7°C	6.86 kW	6.53 kW
COP Tj = +7°C	6.05	4.50
Pdh Tj = 12°C	6.87 kW	6.61 kW
COP Tj = 12°C	7.91	5.90

Pdh Tj = Tbiv	9.73 kW	9.73 kW
COP Tj = Tbiv	3.16	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.86 kW	9.47 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	31 W	31 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.19 kW	1.59 kW
Annual energy consumption Qhe	4898 kWh	6652 kWh

**Model Vitocal 222-S AWBT-E-AC 221.C16**

Model name	Vitocal 222-S AWBT-E-AC 221.C16
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	10.11 kW	9.16 kW
El input	2.04 kW	3.05 kW
COP	4.95	3.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	11.65 kW	11.98 kW
SCOP	4.62	3.42
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	10.30 kW	10.60 kW
COP Tj = -7°C	3.09	2.32
Pdh Tj = +2°C	6.41 kW	6.25 kW
COP Tj = +2°C	4.49	3.34
Pdh Tj = +7°C	7.27 kW	6.78 kW
COP Tj = +7°C	5.94	4.54
Pdh Tj = 12°C	6.88 kW	6.63 kW
COP Tj = 12°C	7.94	5.98

Pdh Tj = Tbiv	10.30 kW	10.60 kW
COP Tj = Tbiv	3.09	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.39 kW	9.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	40 W	40 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.31 kW	2.13 kW
Annual energy consumption Qhe	5210 kWh	7248 kWh

**Model Vitocal 222-S AWBT-E 221.C10**

Model name	Vitocal 222-S AWBT-E 221.C10
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	7.58 kW	7.89 kW
El input	1.51 kW	2.67 kW
COP	5.01	2.96

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	132 %
Prated	9.75 kW	9.67 kW
SCOP	4.58	3.37
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.63 kW	8.56 kW
COP Tj = -7°C	3.27	2.28
Pdh Tj = +2°C	5.34 kW	5.48 kW
COP Tj = +2°C	4.34	3.19
Pdh Tj = +7°C	6.63 kW	6.30 kW
COP Tj = +7°C	5.98	4.43
Pdh Tj = 12°C	6.85 kW	6.61 kW
COP Tj = 12°C	7.81	5.86

Pdh Tj = Tbiv	8.63 kW	8.56 kW
COP Tj = Tbiv	3.27	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.87 kW	8.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.93	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	24 W	24 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.93 kW	1.40 kW
Annual energy consumption Qhe	4398 kWh	5933 kWh

**Model Vitocal 222-S AWBT-E 221.C13**

Model name	Vitocal 222-S AWBT-E 221.C13
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	8.88 kW	8.44 kW
El input	1.78 kW	2.80 kW
COP	4.99	3.01

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	10.99 kW	11.00 kW
SCOP	4.64	3.42
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.73 kW	9.73 kW
COP Tj = -7°C	3.16	2.28
Pdh Tj = +2°C	5.98 kW	5.87 kW
COP Tj = +2°C	4.46	3.28
Pdh Tj = +7°C	6.86 kW	6.53 kW
COP Tj = +7°C	6.05	4.50
Pdh Tj = 12°C	6.87 kW	6.61 kW
COP Tj = 12°C	7.91	5.90

Pdh Tj = Tbiv	9.73 kW	9.73 kW
COP Tj = Tbiv	3.16	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.86 kW	9.47 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	31 W	31 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.19 kW	1.59 kW
Annual energy consumption Qhe	4898 kWh	6652 kWh

**Model Vitocal 222-S AWBT-E 221.C16**

Model name	Vitocal 222-S AWBT-E 221.C16
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	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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	10.11 kW	9.16 kW
El input	2.04 kW	3.05 kW
COP	4.95	3.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	11.65 kW	11.98 kW
SCOP	4.62	3.42
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	10.30 kW	10.60 kW
COP Tj = -7°C	3.09	2.32
Pdh Tj = +2°C	6.41 kW	6.25 kW
COP Tj = +2°C	4.49	3.34
Pdh Tj = +7°C	7.27 kW	6.78 kW
COP Tj = +7°C	5.94	4.54
Pdh Tj = 12°C	6.88 kW	6.63 kW
COP Tj = 12°C	7.94	5.98

Pdh Tj = Tbiv	10.30 kW	10.60 kW
COP Tj = Tbiv	3.09	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.39 kW	9.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	60 °C	60 °C
Poff	40 W	40 W
PTO	0 W	0 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.31 kW	2.13 kW
Annual energy consumption Qhe	5210 kWh	7248 kWh