

Subtype Vitocal 100-S/111-S | 12-16kW 230V

| | |
|---------------------|---|
| 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 230V |
| Registration number | 011-1W0403 |
| 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

| | |
|-------------------------------------|-----------------------------|
| Model name | Vitocal 100-S AWB-M 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 | 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 11.50 kW | 9.86 kW |
| El input | 2.45 kW | 3.52 kW |
| COP | 4.70 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| 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 |
| COP Tj = +7°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 |
| 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 | 2.75 kW | 1.84 kW |
| Annual energy consumption Qhe | 19044 kWh | 18303 kWh |

EN 14825 | Average Climate

| | |
|---------------|---------|
| Pdesignh | 8.90 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|-------------------------------|
| Model name | Vitocal 100-S AWB-M-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 | 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 11.50 kW | 9.86 kW |
| El input | 2.45 kW | 3.52 kW |
| COP | 4.70 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| 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 |
| COP Tj = +7°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 |
| 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 | 2.75 kW | 1.84 kW |
| Annual energy consumption Qhe | 19044 kWh | 18303 kWh |

EN 14825 | Average Climate

| | |
|---------------|---------|
| Pdesignh | 8.90 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|----------------------------------|
| Model name | Vitocal 100-S AWB-M-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 | 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 11.50 kW | 9.86 kW |
| El input | 2.45 kW | 3.52 kW |
| COP | 4.70 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| 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 |
| COP Tj = +7°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 |
| 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 | 2.75 kW | 1.84 kW |
| Annual energy consumption Qhe | 19044 kWh | 18303 kWh |

EN 14825 | Average Climate

| | |
|---------------|---------|
| Pdesignh | 8.90 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|------------------------------------|
| Model name | Vitocal 100-S AWB-M-E-AC 101.A12 F |
| 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 | 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 11.50 kW | 9.86 kW |
| El input | 2.45 kW | 3.52 kW |
| COP | 4.70 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| 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 |
| COP Tj = +7°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 |
| 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 | 2.75 kW | 1.84 kW |
| Annual energy consumption Qhe | 19044 kWh | 18303 kWh |

EN 14825 | Average Climate

| | |
|---------------|---------|
| Pdesignh | 8.90 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|---------------------------------|
| Model name | Vitocal 111-S AWBT-M-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 | 1x230V 50Hz |
| Off-peak product | Yes |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 114 % |
| COP | 2.55 |
| Heating up time | 0:58 h:min |
| Standby power input | 40.4 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 | 9.86 kW |
| El input | 2.45 kW | 3.52 kW |
| COP | 4.70 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| 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 |
| COP Tj = +7°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 |
| 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 | 2.75 kW | 1.84 kW |
| Annual energy consumption Qhe | 19044 kWh | 18303 kWh |

EN 14825 | Average Climate

| | |
|---------------|---------|
| Pdesignh | 8.90 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|--------------------------------|
| Model name | Vitocal 111-S AWBT-M-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 | 1x230V 50Hz |
| Off-peak product | Yes |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 114 % |
| COP | 2.55 |
| Heating up time | 0:58 h:min |
| Standby power input | 40.4 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 | 9.86 kW |
| El input | 2.45 kW | 3.52 kW |
| COP | 4.70 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| 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 |
| COP Tj = +7°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 |
| 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 | 2.75 kW | 1.84 kW |
| Annual energy consumption Qhe | 19044 kWh | 18303 kWh |

EN 14825 | Average Climate

| | |
|---------------|---------|
| Pdesignh | 8.90 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|-----------------------------------|
| Model name | Vitocal 111-S AWBT-M-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 | 1x230V 50Hz |
| Off-peak product | Yes |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 114 % |
| COP | 2.75 |
| Heating up time | 0:58 h:min |
| Standby power input | 40.4 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 | 9.52 kW |
| El input | 2.45 kW | 3.51 kW |
| COP | 4.70 | 2.71 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| 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 | 0.990 | 0.990 |
| Pdh Tj = +2°C | 6.17 kW | 5.54 kW |
| COP Tj = +2°C | 3.93 | 2.76 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 5.99 kW | 9.25 kW |
| COP Tj = +7°C | 5.31 | 3.97 |
| Cdh Tj = +7 °C | 0.990 | 0.990 |
| Pdh Tj = 12°C | 7.44 kW | 6.77 kW |
| COP Tj = 12°C | 7.15 | 5.44 |
| Cdh Tj = +12 °C | 0.990 | 0.990 |
| 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 | 0.990 | 0.990 |
| 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 | 2.75 kW | 2.00 kW |
| Annual energy consumption Qhe | 19044 kWh | 18303 kWh |

EN 14825 | Average Climate

| | |
|---------------|---------|
| Pdesignh | 8.90 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|-------------------------------------|
| Model name | Vitocal 111-S AWBT-M-E-AC 111.A12 F |
| 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 | 1x230V 50Hz |
| Off-peak product | Yes |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 114 % |
| COP | 2.55 |
| Heating up time | 0:58 h:min |
| Standby power input | 40.4 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 | 9.86 kW |
| El input | 2.45 kW | 3.52 kW |
| COP | 4.70 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| 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 |
| COP Tj = +7°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 |
| 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 | 2.75 kW | 1.84 kW |
| Annual energy consumption Qhe | 19044 kWh | 18303 kWh |

EN 14825 | Average Climate

| | |
|---------------|---------|
| Pdesignh | 8.90 kW |
| Backup Heater | 0.00 kW |

Model Vitocal 100-S AWB-M 101.A14

| | |
|-------------------------------------|-----------------------------|
| Model name | Vitocal 100-S AWB-M 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 | 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 13.50 kW | 11.82 kW |
| El input | 2.89 kW | 4.23 kW |
| COP | 4.67 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| 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°C | 5.99 kW | 9.33 kW |
| COP Tj = +7°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 | 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 |
| Annual energy consumption Qhe | 20384 kWh | 22040 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 10.70 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|-------------------------------|
| Model name | Vitocal 100-S AWB-M-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 | 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 13.50 kW | 11.82 kW |
| El input | 2.89 kW | 4.23 kW |
| COP | 4.67 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| 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°C | 5.99 kW | 9.33 kW |
| COP Tj = +7°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 | 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 |
| Annual energy consumption Qhe | 20384 kWh | 22040 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 10.70 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|----------------------------------|
| Model name | Vitocal 100-S AWB-M-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 | 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 13.50 kW | 11.82 kW |
| El input | 2.89 kW | 4.23 kW |
| COP | 4.67 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| 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°C | 5.99 kW | 9.33 kW |
| COP Tj = +7°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 | 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 |
| Annual energy consumption Qhe | 20384 kWh | 22040 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 10.70 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|------------------------------------|
| Model name | Vitocal 100-S AWB-M-E-AC 101.A14 F |
| 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 | 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 13.50 kW | 11.82 kW |
| El input | 2.89 kW | 4.23 kW |
| COP | 4.67 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| 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°C | 5.99 kW | 9.33 kW |
| COP Tj = +7°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 | 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 |
| Annual energy consumption Qhe | 20384 kWh | 22040 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 10.70 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|---------------------------------|
| Model name | Vitocal 111-S AWBT-M-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 | 1x230V 50Hz |
| Off-peak product | Yes |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 114 % |
| COP | 2.55 |
| Heating up time | 0:58 h:min |
| Standby power input | 40.4 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 | 11.82 kW |
| El input | 2.89 kW | 4.23 kW |
| COP | 4.67 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| 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 | 0.990 | 0.990 |
| Pdh Tj = +2°C | 6.34 kW | 6.11 kW |
| COP Tj = +2°C | 3.92 | 2.82 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 5.99 kW | 9.33 kW |
| COP Tj = +7°C | 5.31 | 4.03 |
| Cdh Tj = +7 °C | 0.990 | 0.990 |
| Pdh Tj = 12°C | 7.44 kW | 6.77 kW |
| COP Tj = 12°C | 7.15 | 5.44 |
| Cdh Tj = +12 °C | 0.990 | 0.990 |
| 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 | 0.990 | 0.990 |
| 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 | 2.50 kW | 3.90 kW |
| Annual energy consumption Qhe | 20384 kWh | 22040 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 10.70 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|--------------------------------|
| Model name | Vitocal 111-S AWBT-M-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 | 1x230V 50Hz |
| Off-peak product | Yes |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 114 % |
| COP | 2.55 |
| Heating up time | 0:58 h:min |
| Standby power input | 40.4 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 | 11.82 kW |
| El input | 2.89 kW | 4.23 kW |
| COP | 4.67 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| 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°C | 5.99 kW | 9.33 kW |
| COP Tj = +7°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 | 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 |
| Annual energy consumption Qhe | 20384 kWh | 22040 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 10.70 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|-----------------------------------|
| Model name | Vitocal 111-S AWBT-M-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 | 1x230V 50Hz |
| Off-peak product | Yes |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 114 % |
| COP | 2.75 |
| Heating up time | 0:58 h:min |
| Standby power input | 40.4 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 | 9.34 kW | 11.14 kW |
| El input | 2.35 kW | 4.09 kW |
| COP | 3.97 | 2.72 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| 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°C | 5.99 kW | 9.33 kW |
| COP Tj = +7°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 | 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 |
| Annual energy consumption Qhe | 20384 kWh | 22040 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 10.70 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|-------------------------------------|
| Model name | Vitocal 111-S AWBT-M-E-AC 111.A14 F |
| 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 | 1x230V 50Hz |
| Off-peak product | Yes |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 114 % |
| COP | 2.55 |
| Heating up time | 0:58 h:min |
| Standby power input | 40.4 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 | 11.82 kW |
| El input | 2.89 kW | 4.23 kW |
| COP | 4.67 | 2.80 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| 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°C | 5.99 kW | 9.33 kW |
| COP Tj = +7°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 | 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 |
| Annual energy consumption Qhe | 20384 kWh | 22040 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 10.70 kW |
| Backup Heater | 0.00 kW |

Model Vitocal 100-S AWB-M 101.A16

| | |
|-------------------------------------|-----------------------------|
| Model name | Vitocal 100-S AWB-M 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 | 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 15.50 kW | 13.43 kW |
| El input | 3.42 kW | 4.94 kW |
| COP | 4.53 | 2.72 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| 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°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 | 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 | 2.56 kW | 4.00 kW |
| Annual energy consumption Qhe | 24394 kWh | 24394 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 11.80 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|-------------------------------|
| Model name | Vitocal 100-S AWB-M-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 | 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 15.50 kW | 13.43 kW |
| El input | 3.42 kW | 4.94 kW |
| COP | 4.53 | 2.72 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| 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°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 | 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 | 2.56 kW | 4.00 kW |
| Annual energy consumption Qhe | 24394 kWh | 24394 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 11.80 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|----------------------------------|
| Model name | Vitocal 100-S AWB-M-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 | 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 15.50 kW | 13.43 kW |
| El input | 3.42 kW | 4.94 kW |
| COP | 4.53 | 2.72 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| 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°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 | 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 | 2.56 kW | 4.00 kW |
| Annual energy consumption Qhe | 24394 kWh | 24394 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 11.80 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|------------------------------------|
| Model name | Vitocal 100-S AWB-M-E-AC 101.A16 F |
| 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 | 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 15.50 kW | 13.43 kW |
| El input | 3.42 kW | 4.94 kW |
| COP | 4.53 | 2.72 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| 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°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 | 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 | 2.56 kW | 4.00 kW |
| Annual energy consumption Qhe | 24394 kWh | 24394 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 11.80 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|---------------------------------|
| Model name | Vitocal 111-S AWBT-M-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 | 1x230V 50Hz |
| Off-peak product | Yes |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 114 % |
| COP | 2.55 |
| Heating up time | 0:58 h:min |
| Standby power input | 40.4 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 | 15.50 kW | 13.43 kW |
| El input | 3.42 kW | 4.94 kW |
| COP | 4.53 | 2.72 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| 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°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 | 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 | 2.56 kW | 4.00 kW |
| Annual energy consumption Qhe | 24394 kWh | 24394 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 11.80 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|--------------------------------|
| Model name | Vitocal 111-S AWBT-M-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 | 1x230V 50Hz |
| Off-peak product | Yes |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 114 % |
| COP | 2.55 |
| Heating up time | 0:58 h:min |
| Standby power input | 40.4 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 | 15.50 kW | 13.43 kW |
| El input | 3.42 kW | 4.94 kW |
| COP | 4.53 | 2.72 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| 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°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 | 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 | 2.56 kW | 4.00 kW |
| Annual energy consumption Qhe | 24394 kWh | 24394 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 11.80 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|-----------------------------------|
| Model name | Vitocal 111-S AWBT-M-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 | 1x230V 50Hz |
| Off-peak product | Yes |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 114 % |
| COP | 2.75 |
| Heating up time | 0:58 h:min |
| Standby power input | 40.4 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 | 15.50 kW | 13.09 kW |
| El input | 3.42 kW | 4.77 kW |
| COP | 4.53 | 2.75 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| 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°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 | 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 | 2.56 kW | 4.00 kW |
| Annual energy consumption Qhe | 24394 kWh | 24394 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 11.80 kW |
| Backup Heater | 0.00 kW |

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

| | |
|-------------------------------------|-------------------------------------|
| Model name | Vitocal 111-S AWBT-M-E-AC 111.A16 F |
| 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 | 1x230V 50Hz |
| Off-peak product | Yes |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 114 % |
| COP | 2.55 |
| Heating up time | 0:58 h:min |
| Standby power input | 40.4 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 | 15.50 kW | 13.43 kW |
| El input | 3.42 kW | 4.94 kW |
| COP | 4.53 | 2.72 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |
| Sound power level outdoor | 66 dB(A) | 66 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| 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°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 | 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 | 2.56 kW | 4.00 kW |
| Annual energy consumption Qhe | 24394 kWh | 24394 kWh |

EN 14825 | Average Climate

| | |
|---------------|----------|
| Pdesignh | 11.80 kW |
| Backup Heater | 0.00 kW |