

Subtype VWL 85/7.2 AS 230V S3 / VWL 105/7.2 AS 230V S3

| | |
|---------------------|--|
| Certificate Holder | Vaillant GmbH |
| Address | Berghauser Str. 40 |
| ZIP | 42859 |
| City | Remscheid |
| Country | DE |
| Certification Body | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH |
| Subtype title | VWL 85/7.2 AS 230V S3 / VWL 105/7.2 AS 230V S3 |
| Registration number | 011-1W0554 |
| Heat Pump Type | Outdoor Air/Water |
| Refrigerant | R32 |
| Mass of Refrigerant | 1.6 kg |
| Certification Date | 26.09.2022 |
| Testing basis | European KEYMARK Scheme for Heat Pumps Rev. 10 (as of 2022-06) |

Model VWL 85/7.2 AS 230V S3 + VWL 108/7.2 IS

| | |
|-------------------------------------|--|
| Model name | VWL 85/7.2 AS 230V S3 + VWL 108/7.2 IS |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | Colder, Warmer, Warmer Climate, Colder Climate |
| Heat Source | Outdoor Air |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 94 % |
| COP | 2.36 |
| Heating up time | 00:54 h:min |
| Standby power input | 39.0 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 236 l |

EN 16147 | Colder Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 80 % |
| COP | 2.00 |
| Heating up time | 00:57 h:min |
| Standby power input | 40.9 W |
| Reference hot water temperature | 51.45 °C |
| Mixed water at 40°C | 235.28 l |

EN 16147 | Warmer Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 109 % |
| COP | 2.72 |
| Heating up time | 00:51 h:min |
| Standby power input | 34.9 W |
| Reference hot water temperature | 51.68 °C |
| Mixed water at 40°C | 236.73 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 | 7.88 kW | 6.71 kW |
| El input | 1.70 kW | 2.14 kW |
| COP | 4.65 | 3.14 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 2.27 kW | 1.78 kW |
| Cooling capacity | 6.37 | 7.04 |
| EER | 2.81 | 3.96 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 175 % | 131 % |
| Prated | 7.46 kW | 7.68 kW |
| SCOP | 4.46 | 3.34 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 6.60 kW | 6.80 kW |
| COP Tj = -7°C | 2.84 | 2.16 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = +2°C | 3.89 kW | 4.12 kW |
| COP Tj = +2°C | 4.46 | 3.26 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 4.40 kW | 4.31 kW |
| COP Tj = +7°C | 5.72 | 4.29 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.08 kW | 5.16 kW |
| COP Tj = 12°C | 7.39 | 5.81 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 6.60 kW | 6.80 kW |
| COP Tj = Tbiv | 2.84 | 2.16 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.75 kW | 6.51 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.45 | 1.72 |

| | | |
|---|-------------|-------------|
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.71 kW | 1.18 kW |
| Annual energy consumption Qhe | 3457 kWh | 4755 kWh |

EN 12102-1 | Colder Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 145 % | 109 % |
| Prated | 7.74 kW | 8.13 kW |
| SCOP | 3.71 | 2.81 |
| Tbiv | -15 °C | -15 °C |
| TOL | -20 °C | -15 °C |
| Pdh Tj = -7°C | 4.97 kW | 4.50 kW |
| COP Tj = -7°C | 3.05 | 2.31 |
| Cdh Tj = -7 °C | 0.99 | 1.00 |
| Pdh Tj = +2°C | 3.38 kW | 3.71 kW |
| COP Tj = +2°C | 4.40 | 3.65 |
| Cdh Tj = +2 °C | 0.97 | 0.98 |
| Pdh Tj = +7°C | 4.57 kW | 4.37 kW |
| COP Tj = +7°C | 6.37 | 4.73 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.06 kW | 5.02 kW |
| COP Tj = 12°C | 7.71 | 6.07 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 6.31 kW | 6.63 kW |
| COP Tj = Tbiv | 2.50 | 1.73 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.25 kW | 6.63 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.94 | 1.73 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |

| | | |
|--|-------------|-------------|
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 7.74 kW | 8.13 kW |
| Annual energy consumption Q _{he} | 5141 kWh | 7129 kWh |
| P _{dh} T _j = -15°C (if TOL | 6.31 | 6.63 |
| COP T _j = -15°C (if TOL | 2.50 | 1.73 |
| C _{dh} T _j = -15 °C | 1.00 | 1.00 |

EN 12102-1 | Warmer Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Warmer Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η _s | 225 % | 156 % |
| Prated | 8.03 kW | 7.02 kW |
| SCOP | 5.71 | 3.96 |
| T _{biv} | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| P _{dh} T _j = +2°C | 8.03 kW | 7.02 kW |
| COP T _j = +2°C | 3.35 | 2.16 |
| C _{dh} T _j = +2 °C | 1.00 | 1.00 |
| P _{dh} T _j = +7°C | 5.51 kW | 4.73 kW |
| COP T _j = +7°C | 5.21 | 3.40 |
| C _{dh} T _j = +7 °C | 0.98 | 0.99 |
| P _{dh} T _j = 12°C | 5.41 kW | 5.27 kW |
| COP T _j = 12°C | 7.05 | 5.22 |
| C _{dh} T _j = +12 °C | 0.97 | 0.98 |
| P _{dh} T _j = T _{biv} | 8.03 kW | 7.02 kW |
| COP T _j = T _{biv} | 3.35 | 2.16 |
| P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 8.03 kW | 7.02 kW |
| COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh} | 3.35 | 2.16 |
| C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| P _{off} | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |

| | | |
|-------------------------------|----------|----------|
| Annual energy consumption Qhe | 1878 kWh | 2367 kWh |
|-------------------------------|----------|----------|

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|-------------------------------|------------|-------------|
| Pdesignc | 7.41 kW | 7.04 kW |
| SEER | 4.04 | 6.00 |
| Pdc Tj = 35°C | 7.41 kW | 7.04 kW |
| EER Tj = 35°C | 2.54 | 3.96 |
| Cdc Tj = 35 °C | 0.994 | 1.000 |
| Pdc Tj = 30°C | 5.40 kW | 5.15 kW |
| EER Tj = 30°C | 3.43 | 5.24 |
| Cdc Tj = 30 °C | 0.988 | 1.000 |
| Pdc Tj = 25°C | 3.45 kW | 4.60 kW |
| EER Tj = 25°C | 4.35 | 6.81 |
| Cdc Tj = 25 °C | 0.977 | 0.973 |
| Pdc Tj = 20°C | 4.00 kW | 5.00 kW |
| EER Tj = 20°C | 6.05 | 8.80 |
| Cdc Tj = 20 °C | 0.972 | 0.968 |
| Poff | 15 W | 15 W |
| PTO | 18 W | 18 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1100 kWh | 704 kWh |

Model VWL 85/7.2 AS 230V S3 + VWL 108/7.2 IS S5

| | |
|-------------------------------------|--|
| Model name | VWL 85/7.2 AS 230V S3 + VWL 108/7.2 IS S5 |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | Colder, Warmer, Warmer Climate, Colder Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 94 % |
| COP | 2.36 |
| Heating up time | 00:54 h:min |
| Standby power input | 39.0 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 236 l |

EN 16147 | Colder Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 80 % |
| COP | 2.00 |
| Heating up time | 00:57 h:min |
| Standby power input | 40.9 W |
| Reference hot water temperature | 51.45 °C |
| Mixed water at 40°C | 235.28 l |

EN 16147 | Warmer Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 109 % |
| COP | 2.72 |
| Heating up time | 00:51 h:min |
| Standby power input | 34.9 W |
| Reference hot water temperature | 51.68 °C |
| Mixed water at 40°C | 236.73 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 | 7.88 kW | 6.71 kW |
| El input | 1.70 kW | 2.14 kW |
| COP | 4.65 | 3.14 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 2.27 kW | 1.78 kW |
| Cooling capacity | 6.37 | 7.04 |
| EER | 2.81 | 3.96 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 175 % | 131 % |
| Prated | 7.46 kW | 7.68 kW |
| SCOP | 4.46 | 3.34 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 6.60 kW | 6.80 kW |
| COP Tj = -7°C | 2.84 | 2.16 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = +2°C | 3.89 kW | 4.12 kW |
| COP Tj = +2°C | 4.46 | 3.26 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 4.40 kW | 4.31 kW |
| COP Tj = +7°C | 5.72 | 4.29 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.08 kW | 5.16 kW |
| COP Tj = 12°C | 7.39 | 5.81 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 6.60 kW | 6.80 kW |
| COP Tj = Tbiv | 2.84 | 2.16 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.75 kW | 6.51 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.45 | 1.72 |

| | | |
|---|-------------|-------------|
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.71 kW | 1.18 kW |
| Annual energy consumption Qhe | 3457 kWh | 4755 kWh |

EN 12102-1 | Colder Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 145 % | 109 % |
| Prated | 7.74 kW | 8.13 kW |
| SCOP | 3.71 | 2.81 |
| Tbiv | -15 °C | -15 °C |
| TOL | -20 °C | -15 °C |
| Pdh Tj = -7°C | 4.97 kW | 4.50 kW |
| COP Tj = -7°C | 3.05 | 2.31 |
| Cdh Tj = -7 °C | 0.99 | 1.00 |
| Pdh Tj = +2°C | 3.38 kW | 3.71 kW |
| COP Tj = +2°C | 4.40 | 3.65 |
| Cdh Tj = +2 °C | 0.97 | 0.98 |
| Pdh Tj = +7°C | 4.57 kW | 4.37 kW |
| COP Tj = +7°C | 6.37 | 4.73 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.06 kW | 5.02 kW |
| COP Tj = 12°C | 7.71 | 6.07 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 6.31 kW | 6.63 kW |
| COP Tj = Tbiv | 2.50 | 1.73 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.25 kW | 6.63 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.94 | 1.73 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |

| | | |
|--|-------------|-------------|
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 7.74 kW | 8.13 kW |
| Annual energy consumption Q _{he} | 5141 kWh | 7129 kWh |
| P _{dh} T _j = -15°C (if TOL | 6.31 | 6.63 |
| COP T _j = -15°C (if TOL | 2.50 | 1.73 |
| C _{dh} T _j = -15 °C | 1.00 | 1.00 |

EN 12102-1 | Warmer Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Warmer Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η _s | 225 % | 156 % |
| Prated | 8.03 kW | 7.02 kW |
| SCOP | 5.71 | 3.96 |
| T _{biv} | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| P _{dh} T _j = +2°C | 8.03 kW | 7.02 kW |
| COP T _j = +2°C | 3.35 | 2.16 |
| C _{dh} T _j = +2 °C | 1.00 | 1.00 |
| P _{dh} T _j = +7°C | 5.51 kW | 4.73 kW |
| COP T _j = +7°C | 5.21 | 3.40 |
| C _{dh} T _j = +7 °C | 0.98 | 0.99 |
| P _{dh} T _j = 12°C | 5.41 kW | 5.27 kW |
| COP T _j = 12°C | 7.05 | 5.22 |
| C _{dh} T _j = +12 °C | 0.97 | 0.98 |
| P _{dh} T _j = T _{biv} | 8.03 kW | 7.02 kW |
| COP T _j = T _{biv} | 3.35 | 2.16 |
| P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 8.03 kW | 7.02 kW |
| COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh} | 3.35 | 2.16 |
| C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| P _{off} | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |

| | | |
|---|----------|----------|
| Annual energy consumption Q _{he} | 1878 kWh | 2367 kWh |
|---|----------|----------|

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|---|------------|-------------|
| P _{designc} | 7.41 kW | 7.04 kW |
| SEER | 4.04 | 6.00 |
| P _{dc Tj = 35°C} | 7.41 kW | 7.04 kW |
| EER T _j = 35°C | 2.54 | 3.96 |
| C _{dc Tj = 35 °C} | 0.994 | 1.000 |
| P _{dc Tj = 30°C} | 5.40 kW | 5.15 kW |
| EER T _j = 30°C | 3.43 | 5.24 |
| C _{dc Tj = 30 °C} | 0.988 | 1.000 |
| P _{dc Tj = 25°C} | 3.45 kW | 4.60 kW |
| EER T _j = 25°C | 4.35 | 6.81 |
| C _{dc Tj = 25 °C} | 0.977 | 0.973 |
| P _{dc Tj = 20°C} | 4.00 kW | 5.00 kW |
| EER T _j = 20°C | 6.05 | 8.80 |
| C _{dc Tj = 20 °C} | 0.972 | 0.968 |
| P _{off} | 15 W | 15 W |
| PTO | 18 W | 18 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Q _{ce} | 1100 kWh | 704 kWh |

Model VWL 85/7.2 AS 230V S3 + VWL 107/7.2 IS

| | |
|-------------------------------------|--|
| Model name | VWL 85/7.2 AS 230V S3 + VWL 107/7.2 IS |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | Colder, Warmer, Warmer Climate, Colder Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

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 | 7.88 kW | 6.71 kW |
| El input | 1.70 kW | 2.14 kW |
| COP | 4.65 | 3.14 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 2.27 kW | 1.78 kW |
| Cooling capacity | 6.37 | 7.04 |
| EER | 2.81 | 3.96 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 175 % | 131 % |
| Prated | 7.46 kW | 7.68 kW |
| SCOP | 4.46 | 3.34 |
| Tbiv | -7 °C | -7 °C |

| | | |
|---|-------------|-------------|
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 6.60 kW | 6.80 kW |
| COP Tj = -7°C | 2.84 | 2.16 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = +2°C | 3.89 kW | 4.12 kW |
| COP Tj = +2°C | 4.46 | 3.26 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 4.40 kW | 4.31 kW |
| COP Tj = +7°C | 5.72 | 4.29 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.08 kW | 5.16 kW |
| COP Tj = 12°C | 7.39 | 5.81 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 6.60 kW | 6.80 kW |
| COP Tj = Tbiv | 2.84 | 2.16 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.75 kW | 6.51 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.45 | 1.72 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.71 kW | 1.18 kW |
| Annual energy consumption Qhe | 3457 kWh | 4755 kWh |

EN 12102-1 | Colder Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| ηs | 145 % | 109 % |
| Prated | 7.74 kW | 8.13 kW |
| SCOP | 3.71 | 2.81 |
| Tbiv | -15 °C | -15 °C |
| TOL | -20 °C | -15 °C |
| Pdh Tj = -7°C | 4.97 kW | 4.50 kW |
| COP Tj = -7°C | 3.05 | 2.31 |
| Cdh Tj = -7 °C | 0.99 | 1.00 |
| Pdh Tj = +2°C | 3.38 kW | 3.71 kW |

| | | |
|---|-------------|-------------|
| COP Tj = +2°C | 4.40 | 3.65 |
| Cdh Tj = +2 °C | 0.97 | 0.98 |
| Pdh Tj = +7°C | 4.57 kW | 4.37 kW |
| COP Tj = +7°C | 6.37 | 4.73 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.06 kW | 5.02 kW |
| COP Tj = 12°C | 7.71 | 6.07 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 6.31 kW | 6.63 kW |
| COP Tj = Tbiv | 2.50 | 1.73 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.25 kW | 6.63 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.94 | 1.73 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 7.74 kW | 8.13 kW |
| Annual energy consumption Qhe | 5141 kWh | 7129 kWh |
| Pdh Tj = -15°C (if TOL | 6.31 | 6.63 |
| COP Tj = -15°C (if TOL | 2.50 | 1.73 |
| Cdh Tj = -15 °C | 1.00 | 1.00 |

EN 12102-1 | Warmer Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Warmer Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 225 % | 156 % |
| Prated | 8.03 kW | 7.02 kW |
| SCOP | 5.71 | 3.96 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 8.03 kW | 7.02 kW |
| COP Tj = +2°C | 3.35 | 2.16 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 5.51 kW | 4.73 kW |
| COP Tj = +7°C | 5.21 | 3.40 |
| Cdh Tj = +7 °C | 0.98 | 0.99 |

| | | |
|---|-------------|-------------|
| Pdh Tj = 12°C | 5.41 kW | 5.27 kW |
| COP Tj = 12°C | 7.05 | 5.22 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 8.03 kW | 7.02 kW |
| COP Tj = Tbiv | 3.35 | 2.16 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.03 kW | 7.02 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.35 | 2.16 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 1878 kWh | 2367 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|-------------------------------|------------|-------------|
| Pdesignc | 7.41 kW | 7.04 kW |
| SEER | 4.04 | 6.00 |
| Pdc Tj = 35°C | 7.41 kW | 7.04 kW |
| EER Tj = 35°C | 2.54 | 3.96 |
| Cdc Tj = 35 °C | 0.994 | 1.000 |
| Pdc Tj = 30°C | 5.40 kW | 5.15 kW |
| EER Tj = 30°C | 3.43 | 5.24 |
| Cdc Tj = 30 °C | 0.988 | 1.000 |
| Pdc Tj = 25°C | 3.45 kW | 4.60 kW |
| EER Tj = 25°C | 4.35 | 6.81 |
| Cdc Tj = 25 °C | 0.977 | 0.973 |
| Pdc Tj = 20°C | 4.00 kW | 5.00 kW |
| EER Tj = 20°C | 6.05 | 8.80 |
| Cdc Tj = 20 °C | 0.972 | 0.968 |
| Poff | 15 W | 15 W |
| PTO | 18 W | 18 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1100 kWh | 704 kWh |

Model VWL 85/7.2 AS 230V S3 + VWL 107/7.2 IS S1

| | |
|-------------------------------------|---|
| Model name | VWL 85/7.2 AS 230V S3 + VWL 107/7.2 IS S1 |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | Warmer, Warmer Climate |
| Heat Source | Outdoor Air |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

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 | 7.88 kW | 6.71 kW |
| El input | 1.70 kW | 2.14 kW |
| COP | 4.65 | 3.14 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 2.27 kW | 1.78 kW |
| Cooling capacity | 6.37 | 7.04 |
| EER | 2.81 | 3.96 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 39 dB(A) | 39 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 175 % | 130 % |
| Prated | 5.75 kW | 6.51 kW |
| SCOP | 4.45 | 3.33 |

| | | |
|---|----------|----------|
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 6.60 kW | 6.80 kW |
| COP Tj = -7°C | 2.84 | 2.16 |
| Cdh Tj = -7 °C | 0.990 | 0.990 |
| Pdh Tj = +2°C | 3.89 kW | 4.12 kW |
| COP Tj = +2°C | 4.46 | 3.26 |
| Cdh Tj = +2 °C | 0.980 | 0.980 |
| Pdh Tj = +7°C | 4.40 kW | 4.31 kW |
| COP Tj = +7°C | 5.72 | 4.29 |
| Cdh Tj = +7 °C | 0.970 | 0.980 |
| Pdh Tj = 12°C | 5.08 kW | 5.16 kW |
| COP Tj = 12°C | 7.39 | 5.81 |
| Cdh Tj = +12 °C | 0.970 | 0.980 |
| Pdh Tj = Tbiv | 5.75 kW | 6.51 kW |
| COP Tj = Tbiv | 2.45 | 1.72 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.75 kW | 6.51 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.45 | 1.72 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000 | 1.000 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | n/a | n/a |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 2669 kWh | 4032 kWh |

EN 12102-1 | Warmer Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 39 dB(A) | 39 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Warmer Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 225 % | 156 % |
| Prated | 8.03 kW | 7.02 kW |
| SCOP | 5.71 | 3.96 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 8.03 kW | 7.02 kW |
| COP Tj = +2°C | 3.35 | 2.16 |
| Cdh Tj = +2 °C | 1.000 | 1.000 |

| | | |
|---|----------|----------|
| Pdh Tj = +7°C | 5.51 kW | 4.73 kW |
| COP Tj = +7°C | 5.21 | 3.40 |
| Cdh Tj = +7 °C | 0.980 | 0.990 |
| Pdh Tj = 12°C | 5.41 kW | 5.27 kW |
| COP Tj = 12°C | 7.05 | 5.22 |
| Cdh Tj = +12 °C | 0.970 | 0.980 |
| Pdh Tj = Tbiv | 8.03 kW | 7.02 kW |
| COP Tj = Tbiv | 3.35 | 2.16 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.03 kW | 7.02 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.35 | 2.16 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000 | 1.000 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | n/a | n/a |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 1878 kWh | 2367 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|-------------------------------|------------|-------------|
| Pdesignc | 7.41 kW | 7.04 kW |
| SEER | 4.04 | 6.00 |
| Pdc Tj = 35°C | 7.41 kW | 7.04 kW |
| EER Tj = 35°C | 2.54 | 3.96 |
| Cdc Tj = 35 °C | 1.000 | 1.000 |
| Pdc Tj = 30°C | 5.40 kW | 5.15 kW |
| EER Tj = 30°C | 3.43 | 5.24 |
| Cdc Tj = 30 °C | 1.000 | 1.000 |
| Pdc Tj = 25°C | 3.45 kW | 4.60 kW |
| EER Tj = 25°C | 4.35 | 6.81 |
| Cdc Tj = 25 °C | 1.000 | 0.973 |
| Pdc Tj = 20°C | 4.00 kW | 5.00 kW |
| EER Tj = 20°C | 6.05 | 8.80 |
| Cdc Tj = 20 °C | 0.972 | 0.968 |
| Poff | 15 W | 15 W |
| PTO | 18 W | 18 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1100 kWh | 704 kWh |

Model VWL 85/7.2 AS 230V S3 + VWL 108/7.2 IS C2

| | |
|-------------------------------------|--|
| Model name | VWL 85/7.2 AS 230V S3 + VWL 108/7.2 IS C2 |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | Colder, Warmer, Warmer Climate, Colder Climate |
| Heat Source | Outdoor Air |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 94 % |
| COP | 2.36 |
| Heating up time | 00:54 h:min |
| Standby power input | 39.0 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 236 l |

EN 16147 | Colder Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 80 % |
| COP | 2.00 |
| Heating up time | 00:57 h:min |
| Standby power input | 40.9 W |
| Reference hot water temperature | 51.45 °C |
| Mixed water at 40°C | 235.28 l |

EN 16147 | Warmer Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 109 % |
| COP | 2.72 |
| Heating up time | 00:51 h:min |
| Standby power input | 34.9 W |
| Reference hot water temperature | 51.68 °C |
| Mixed water at 40°C | 236.73 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 | 7.88 kW | 6.71 kW |
| El input | 1.75 kW | 2.19 kW |
| COP | 4.51 | 3.07 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 2.32 kW | 1.83 kW |
| Cooling capacity | 6.37 | 7.04 |
| EER | 2.75 | 3.85 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 166 % | 126 % |
| Prated | 7.46 kW | 7.68 kW |
| SCOP | 4.24 | 3.22 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 6.60 kW | 6.80 kW |
| COP Tj = -7°C | 2.78 | 2.13 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = +2°C | 3.89 kW | 4.12 kW |
| COP Tj = +2°C | 4.22 | 3.13 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 4.40 kW | 4.31 kW |
| COP Tj = +7°C | 5.37 | 4.09 |
| Cdh Tj = +7 °C | 0.98 | 0.98 |
| Pdh Tj = 12°C | 5.08 kW | 5.16 kW |
| COP Tj = 12°C | 6.89 | 5.50 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 6.60 kW | 6.80 kW |
| COP Tj = Tbiv | 2.78 | 2.13 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.75 kW | 6.51 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.39 | 1.70 |

| | | |
|---|-------------|-------------|
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.71 kW | 1.18 kW |
| Annual energy consumption Qhe | 3636 kWh | 4934 kWh |

EN 12102-1 | Colder Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 139 % | 106 % |
| Prated | 7.74 kW | 8.13 kW |
| SCOP | 3.55 | 2.72 |
| Tbiv | -15 °C | -15 °C |
| TOL | -20 °C | -15 °C |
| Pdh Tj = -7°C | 4.97 kW | 4.50 kW |
| COP Tj = -7°C | 2.96 | 2.26 |
| Cdh Tj = -7 °C | 0.99 | 1.00 |
| Pdh Tj = +2°C | 3.38 kW | 3.71 kW |
| COP Tj = +2°C | 4.13 | 3.48 |
| Cdh Tj = +2 °C | 0.98 | 0.98 |
| Pdh Tj = +7°C | 4.57 kW | 4.37 kW |
| COP Tj = +7°C | 5.96 | 4.49 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.06 kW | 5.02 kW |
| COP Tj = 12°C | 7.16 | 5.72 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 6.31 kW | 6.63 kW |
| COP Tj = Tbiv | 2.45 | 1.70 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.25 kW | 6.63 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.90 | 1.70 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |

| | | |
|--|-------------|-------------|
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 7.74 kW | 8.13 kW |
| Annual energy consumption Q _{he} | 5375 kWh | 7367 kWh |
| P _{dh} T _j = -15°C (if TOL | 6.31 | 6.63 |
| COP T _j = -15°C (if TOL | 2.45 | 1.70 |
| C _{dh} T _j = -15 °C | 1.00 | 1.00 |

EN 12102-1 | Warmer Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Warmer Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η _s | 214 % | 149 % |
| Prated | 8.03 kW | 7.02 kW |
| SCOP | 5.43 | 3.81 |
| T _{biv} | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| P _{dh} T _j = +2°C | 8.03 kW | 7.02 kW |
| COP T _j = +2°C | 3.28 | 2.13 |
| C _{dh} T _j = +2 °C | 1.00 | 1.00 |
| P _{dh} T _j = +7°C | 5.51 kW | 4.73 kW |
| COP T _j = +7°C | 4.97 | 3.28 |
| C _{dh} T _j = +7 °C | 0.98 | 0.99 |
| P _{dh} T _j = 12°C | 5.41 kW | 5.27 kW |
| COP T _j = 12°C | 6.62 | 4.97 |
| C _{dh} T _j = +12 °C | 0.98 | 0.98 |
| P _{dh} T _j = T _{biv} | 8.03 kW | 7.02 kW |
| COP T _j = T _{biv} | 3.28 | 2.13 |
| P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 8.03 kW | 7.02 kW |
| COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh} | 3.28 | 2.13 |
| C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| P _{off} | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |

| | | |
|---|------------|-------------|
| Annual energy consumption Q _{he} | 1976 kWh | 2460 kWh |
| EN 14825 Cooling | | |
| | +7°C/+12°C | +18°C/+23°C |
| P _{designc} | 7.41 kW | 7.04 kW |
| SEER | 3.85 | 5.66 |
| P _{dc Tj = 35°C} | 7.41 kW | 7.04 kW |
| EER T _j = 35°C | 2.49 | 3.85 |
| C _{dc Tj = 35 °C} | 0.994 | 1.000 |
| P _{dc Tj = 30°C} | 5.40 kW | 5.15 kW |
| EER T _j = 30°C | 3.33 | 4.98 |
| C _{dc Tj = 30 °C} | 0.989 | 1.000 |
| P _{dc Tj = 25°C} | 3.45 kW | 4.60 kW |
| EER T _j = 25°C | 4.09 | 6.34 |
| C _{dc Tj = 25 °C} | 0.978 | 0.975 |
| P _{dc Tj = 20°C} | 4.00 kW | 5.00 kW |
| EER T _j = 20°C | 5.63 | 8.09 |
| C _{dc Tj = 20 °C} | 0.974 | 0.970 |
| P _{off} | 15 W | 15 W |
| PTO | 18 W | 18 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Q _{ce} | 1155 kWh | 747 kWh |

Model VWL 105/7.2 AS 230V S3 + VWL 108/7.2 IS

| | |
|-------------------------------------|--|
| Model name | VWL 105/7.2 AS 230V S3 + VWL 108/7.2 IS |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | Colder, Warmer, Warmer Climate, Colder Climate |
| Heat Source | Outdoor Air |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 94 % |
| COP | 2.36 |
| Heating up time | 00:54 h:min |
| Standby power input | 39.0 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 236 l |

EN 16147 | Colder Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 80 % |
| COP | 2.00 |
| Heating up time | 00:57 h:min |
| Standby power input | 40.9 W |
| Reference hot water temperature | 51.45 °C |
| Mixed water at 40°C | 235.28 l |

EN 16147 | Warmer Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 109 % |
| COP | 2.72 |
| Heating up time | 00:51 h:min |
| Standby power input | 34.9 W |
| Reference hot water temperature | 51.68 °C |
| Mixed water at 40°C | 236.73 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 | 9.85 kW | 7.40 kW |
| El input | 2.11 kW | 2.32 kW |
| COP | 4.68 | 3.19 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 3.00 kW | 1.90 kW |
| Cooling capacity | 7.32 | 7.16 |
| EER | 2.44 | 3.76 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 178 % | 130 % |
| Prated | 7.75 kW | 8.35 kW |
| SCOP | 4.51 | 3.34 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 6.86 kW | 7.38 kW |
| COP Tj = -7°C | 2.80 | 2.24 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = +2°C | 4.10 kW | 4.39 kW |
| COP Tj = +2°C | 4.43 | 3.10 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 4.47 kW | 4.45 kW |
| COP Tj = +7°C | 6.09 | 4.51 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.12 kW | 5.34 kW |
| COP Tj = 12°C | 7.95 | 6.07 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 6.86 kW | 7.38 kW |
| COP Tj = Tbiv | 2.80 | 2.24 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.08 kW | 7.07 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.40 | 1.98 |

| | | |
|---|-------------|-------------|
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.67 kW | 1.28 kW |
| Annual energy consumption Qhe | 3548 kWh | 5170 kWh |

EN 12102-1 | Colder Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 144 % | 106 % |
| Prated | 6.86 kW | 8.14 kW |
| SCOP | 3.69 | 2.72 |
| Tbiv | -15 °C | -15 °C |
| TOL | -20 °C | -15 °C |
| Pdh Tj = -7°C | 4.31 kW | 4.73 kW |
| COP Tj = -7°C | 3.00 | 2.20 |
| Cdh Tj = -7 °C | 0.99 | 1.00 |
| Pdh Tj = +2°C | 3.62 kW | 3.34 kW |
| COP Tj = +2°C | 4.54 | 3.48 |
| Cdh Tj = +2 °C | 0.97 | 0.98 |
| Pdh Tj = +7°C | 4.44 kW | 4.42 kW |
| COP Tj = +7°C | 6.02 | 5.02 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.08 kW | 5.18 kW |
| COP Tj = 12°C | 7.37 | 5.62 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 5.60 kW | 6.64 kW |
| COP Tj = Tbiv | 2.20 | 1.72 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.80 kW | 6.64 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.09 | 1.72 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |

| | | |
|--|-------------|-------------|
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 6.86 kW | 8.14 kW |
| Annual energy consumption Q _{he} | 4587 kWh | 7362 kWh |
| P _{dh} T _j = -15°C (if TOL | 5.60 | 6.64 |
| COP T _j = -15°C (if TOL | 2.20 | 1.72 |
| C _{dh} T _j = -15 °C | 1.00 | 1.00 |

EN 12102-1 | Warmer Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Warmer Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η _s | 225 % | 162 % |
| Prated | 8.03 kW | 7.39 kW |
| SCOP | 5.71 | 4.12 |
| T _{biv} | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| P _{dh} T _j = +2°C | 8.03 kW | 7.39 kW |
| COP T _j = +2°C | 3.35 | 2.08 |
| C _{dh} T _j = +2 °C | 1.00 | 1.00 |
| P _{dh} T _j = +7°C | 5.51 kW | 5.16 kW |
| COP T _j = +7°C | 5.21 | 3.50 |
| C _{dh} T _j = +7 °C | 0.98 | 0.99 |
| P _{dh} T _j = 12°C | 5.41 kW | 5.40 kW |
| COP T _j = 12°C | 7.05 | 5.55 |
| C _{dh} T _j = +12 °C | 0.97 | 0.98 |
| P _{dh} T _j = T _{biv} | 8.03 kW | 7.39 kW |
| COP T _j = T _{biv} | 3.35 | 2.08 |
| P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 8.03 kW | 7.39 kW |
| COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh} | 3.35 | 2.08 |
| C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| P _{off} | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |

| | | |
|---|------------|-------------|
| Annual energy consumption Q _{he} | 1878 kWh | 2396 kWh |
| EN 14825 Cooling | | |
| | +7°C/+12°C | +18°C/+23°C |
| P _{designc} | 7.69 kW | 8.44 kW |
| SEER | 3.97 | 5.94 |
| P _{dc} T _j = 35°C | 7.69 kW | 8.44 kW |
| EER T _j = 35°C | 2.39 | 3.61 |
| C _{dc} T _j = 35 °C | 1.000 | 1.000 |
| P _{dc} T _j = 30°C | 5.34 kW | 5.98 kW |
| EER T _j = 30°C | 3.43 | 5.01 |
| C _{dc} T _j = 30 °C | 1.000 | 1.000 |
| P _{dc} T _j = 25°C | 3.32 kW | 4.48 kW |
| EER T _j = 25°C | 4.44 | 6.84 |
| C _{dc} T _j = 25 °C | 0.975 | 0.972 |
| P _{dc} T _j = 20°C | 3.65 kW | 4.82 kW |
| EER T _j = 20°C | 5.50 | 8.57 |
| C _{dc} T _j = 20 °C | 0.972 | 0.967 |
| P _{off} | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Q _{ce} | 1161 kWh | 853 kWh |

Model VWL 105/7.2 AS 230V S3 + VWL 108/7.2 IS S5

| | |
|-------------------------------------|--|
| Model name | VWL 105/7.2 AS 230V S3 + VWL 108/7.2 IS S5 |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | Colder, Warmer, Warmer Climate, Colder Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 94 % |
| COP | 2.36 |
| Heating up time | 00:54 h:min |
| Standby power input | 39.0 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 236 l |

EN 16147 | Colder Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 80 % |
| COP | 2.00 |
| Heating up time | 00:57 h:min |
| Standby power input | 40.9 W |
| Reference hot water temperature | 51.45 °C |
| Mixed water at 40°C | 235.28 l |

EN 16147 | Warmer Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 109 % |
| COP | 2.72 |
| Heating up time | 00:51 h:min |
| Standby power input | 34.9 W |
| Reference hot water temperature | 51.68 °C |
| Mixed water at 40°C | 236.73 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 | 9.85 kW | 7.40 kW |
| El input | 2.11 kW | 2.32 kW |
| COP | 4.68 | 3.19 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 3.00 kW | 1.90 kW |
| Cooling capacity | 7.32 | 7.16 |
| EER | 2.44 | 3.76 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 178 % | 130 % |
| Prated | 7.75 kW | 8.35 kW |
| SCOP | 4.51 | 3.34 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 6.86 kW | 7.38 kW |
| COP Tj = -7°C | 2.80 | 2.24 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = +2°C | 4.10 kW | 4.39 kW |
| COP Tj = +2°C | 4.43 | 3.10 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 4.47 kW | 4.45 kW |
| COP Tj = +7°C | 6.09 | 4.51 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.12 kW | 5.34 kW |
| COP Tj = 12°C | 7.95 | 6.07 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 6.86 kW | 7.38 kW |
| COP Tj = Tbiv | 2.80 | 2.24 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.08 kW | 7.07 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.40 | 1.98 |

| | | |
|---|-------------|-------------|
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.67 kW | 1.28 kW |
| Annual energy consumption Qhe | 3548 kWh | 5170 kWh |

EN 12102-1 | Colder Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 144 % | 106 % |
| Prated | 6.86 kW | 8.14 kW |
| SCOP | 3.69 | 2.72 |
| Tbiv | -15 °C | -15 °C |
| TOL | -20 °C | -15 °C |
| Pdh Tj = -7°C | 4.31 kW | 4.73 kW |
| COP Tj = -7°C | 3.00 | 2.20 |
| Cdh Tj = -7 °C | 0.99 | 1.00 |
| Pdh Tj = +2°C | 3.62 kW | 3.34 kW |
| COP Tj = +2°C | 4.54 | 3.48 |
| Cdh Tj = +2 °C | 0.97 | 0.98 |
| Pdh Tj = +7°C | 4.44 kW | 4.42 kW |
| COP Tj = +7°C | 6.02 | 5.02 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.08 kW | 5.18 kW |
| COP Tj = 12°C | 7.37 | 5.62 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 5.60 kW | 6.64 kW |
| COP Tj = Tbiv | 2.20 | 1.72 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.80 kW | 6.64 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.09 | 1.72 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |

| | | |
|--|-------------|-------------|
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 6.86 kW | 8.14 kW |
| Annual energy consumption Q _{he} | 4587 kWh | 7362 kWh |
| P _{dh} T _j = -15°C (if TOL | 5.60 | 6.64 |
| COP T _j = -15°C (if TOL | 2.20 | 1.72 |
| C _{dh} T _j = -15 °C | 1.00 | 1.00 |

EN 12102-1 | Warmer Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Warmer Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η _s | 225 % | 162 % |
| Prated | 8.03 kW | 7.39 kW |
| SCOP | 5.71 | 4.12 |
| T _{biv} | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| P _{dh} T _j = +2°C | 8.03 kW | 7.39 kW |
| COP T _j = +2°C | 3.35 | 2.08 |
| C _{dh} T _j = +2 °C | 1.00 | 1.00 |
| P _{dh} T _j = +7°C | 5.51 kW | 5.16 kW |
| COP T _j = +7°C | 5.21 | 3.50 |
| C _{dh} T _j = +7 °C | 0.98 | 0.99 |
| P _{dh} T _j = 12°C | 5.41 kW | 5.40 kW |
| COP T _j = 12°C | 7.05 | 5.55 |
| C _{dh} T _j = +12 °C | 0.97 | 0.98 |
| P _{dh} T _j = T _{biv} | 8.03 kW | 7.39 kW |
| COP T _j = T _{biv} | 3.35 | 2.08 |
| P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 8.03 kW | 7.39 kW |
| COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh} | 3.35 | 2.08 |
| C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| P _{off} | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |

| | | |
|---|----------|----------|
| Annual energy consumption Q _{he} | 1878 kWh | 2396 kWh |
|---|----------|----------|

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|---|------------|-------------|
| P _{designc} | 7.69 kW | 8.44 kW |
| SEER | 3.97 | 5.94 |
| P _{dc} T _j = 35°C | 7.69 kW | 8.44 kW |
| EER T _j = 35°C | 2.39 | 3.61 |
| C _{dc} T _j = 35 °C | 1.000 | 1.000 |
| P _{dc} T _j = 30°C | 5.34 kW | 5.98 kW |
| EER T _j = 30°C | 3.43 | 5.01 |
| C _{dc} T _j = 30 °C | 1.000 | 1.000 |
| P _{dc} T _j = 25°C | 3.32 kW | 4.48 kW |
| EER T _j = 25°C | 4.44 | 6.84 |
| C _{dc} T _j = 25 °C | 0.975 | 0.972 |
| P _{dc} T _j = 20°C | 3.65 kW | 4.82 kW |
| EER T _j = 20°C | 5.50 | 8.57 |
| C _{dc} T _j = 20 °C | 0.972 | 0.967 |
| P _{off} | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Q _{ce} | 1161 kWh | 853 kWh |

Model VWL 105/7.2 AS 230V S3 + VWL 107/7.2 IS

| | |
|-------------------------------------|--|
| Model name | VWL 105/7.2 AS 230V S3 + VWL 107/7.2 IS |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | Colder, Warmer, Warmer Climate, Colder Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

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 | 9.85 kW | 7.40 kW |
| El input | 2.11 kW | 2.32 kW |
| COP | 4.68 | 3.19 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 3.00 kW | 1.90 kW |
| Cooling capacity | 7.32 | 7.16 |
| EER | 2.44 | 3.76 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 178 % | 130 % |
| Prated | 7.75 kW | 8.35 kW |
| SCOP | 4.51 | 3.34 |
| Tbiv | -7 °C | -7 °C |

| | | |
|---|-------------|-------------|
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 6.86 kW | 7.38 kW |
| COP Tj = -7°C | 2.80 | 2.24 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = +2°C | 4.10 kW | 4.39 kW |
| COP Tj = +2°C | 4.43 | 3.10 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 4.47 kW | 4.45 kW |
| COP Tj = +7°C | 6.09 | 4.51 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.12 kW | 5.34 kW |
| COP Tj = 12°C | 7.95 | 6.07 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 6.86 kW | 7.38 kW |
| COP Tj = Tbiv | 2.80 | 2.24 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.08 kW | 7.07 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.40 | 1.98 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.67 kW | 1.28 kW |
| Annual energy consumption Qhe | 3548 kWh | 5170 kWh |

EN 12102-1 | Colder Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 144 % | 106 % |
| Prated | 6.86 kW | 8.14 kW |
| SCOP | 3.69 | 2.72 |
| Tbiv | -15 °C | -15 °C |
| TOL | -20 °C | -15 °C |
| Pdh Tj = -7°C | 4.31 kW | 4.73 kW |
| COP Tj = -7°C | 3.00 | 2.20 |
| Cdh Tj = -7 °C | 0.99 | 1.00 |
| Pdh Tj = +2°C | 3.62 kW | 3.34 kW |

| | | |
|---|-------------|-------------|
| COP Tj = +2°C | 4.54 | 3.48 |
| Cdh Tj = +2 °C | 0.97 | 0.98 |
| Pdh Tj = +7°C | 4.44 kW | 4.42 kW |
| COP Tj = +7°C | 6.02 | 5.02 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.08 kW | 5.18 kW |
| COP Tj = 12°C | 7.37 | 5.62 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 5.60 kW | 6.64 kW |
| COP Tj = Tbiv | 2.20 | 1.72 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.80 kW | 6.64 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.09 | 1.72 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 6.86 kW | 8.14 kW |
| Annual energy consumption Qhe | 4587 kWh | 7362 kWh |
| Pdh Tj = -15°C (if TOL | 5.60 | 6.64 |
| COP Tj = -15°C (if TOL | 2.20 | 1.72 |
| Cdh Tj = -15 °C | 1.00 | 1.00 |

EN 12102-1 | Warmer Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Warmer Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 225 % | 162 % |
| Prated | 8.03 kW | 7.39 kW |
| SCOP | 5.71 | 4.12 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 8.03 kW | 7.39 kW |
| COP Tj = +2°C | 3.35 | 2.08 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 5.51 kW | 5.16 kW |
| COP Tj = +7°C | 5.21 | 3.50 |
| Cdh Tj = +7 °C | 0.98 | 0.99 |

| | | |
|---|-------------|-------------|
| Pdh Tj = 12°C | 5.41 kW | 5.40 kW |
| COP Tj = 12°C | 7.05 | 5.55 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 8.03 kW | 7.39 kW |
| COP Tj = Tbiv | 3.35 | 2.08 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.03 kW | 7.39 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.35 | 2.08 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 1878 kWh | 2396 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|-------------------------------|------------|-------------|
| Pdesignc | 7.69 kW | 8.44 kW |
| SEER | 3.97 | 5.94 |
| Pdc Tj = 35°C | 7.69 kW | 8.44 kW |
| EER Tj = 35°C | 2.39 | 3.61 |
| Cdc Tj = 35 °C | 1.000 | 1.000 |
| Pdc Tj = 30°C | 5.34 kW | 5.98 kW |
| EER Tj = 30°C | 3.43 | 5.01 |
| Cdc Tj = 30 °C | 1.000 | 1.000 |
| Pdc Tj = 25°C | 3.32 kW | 4.48 kW |
| EER Tj = 25°C | 4.44 | 6.84 |
| Cdc Tj = 25 °C | 0.975 | 0.972 |
| Pdc Tj = 20°C | 3.65 kW | 4.82 kW |
| EER Tj = 20°C | 5.50 | 8.57 |
| Cdc Tj = 20 °C | 0.972 | 0.967 |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1161 kWh | 853 kWh |

Model VWL 105/7.2 AS 230V S3 + VWL 108/7.2 IS C2

| | |
|-------------------------------------|--|
| Model name | VWL 105/7.2 AS 230V S3 + VWL 108/7.2 IS C2 |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | Colder, Warmer, Warmer Climate, Colder Climate |
| Heat Source | Outdoor Air |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 94 % |
| COP | 2.36 |
| Heating up time | 00:54 h:min |
| Standby power input | 39.0 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 236 l |

EN 16147 | Colder Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 80 % |
| COP | 2.00 |
| Heating up time | 00:57 h:min |
| Standby power input | 40.9 W |
| Reference hot water temperature | 51.45 °C |
| Mixed water at 40°C | 235.28 l |

EN 16147 | Warmer Climate

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 109 % |
| COP | 2.72 |
| Heating up time | 00:51 h:min |
| Standby power input | 34.9 W |
| Reference hot water temperature | 51.68 °C |
| Mixed water at 40°C | 236.73 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 | 9.85 kW | 7.40 kW |
| El input | 2.16 kW | 2.37 kW |
| COP | 4.57 | 3.12 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 3.05 kW | 1.95 kW |
| Cooling capacity | 7.32 | 7.16 |
| EER | 2.40 | 3.67 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 169 % | 126 % |
| Prated | 7.75 kW | 8.35 kW |
| SCOP | 4.30 | 3.22 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 6.86 kW | 7.38 kW |
| COP Tj = -7°C | 2.74 | 2.21 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = +2°C | 4.10 kW | 4.39 kW |
| COP Tj = +2°C | 4.20 | 3.00 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 4.47 kW | 4.45 kW |
| COP Tj = +7°C | 5.70 | 4.29 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.12 kW | 5.34 kW |
| COP Tj = 12°C | 7.37 | 5.74 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 6.86 kW | 7.38 kW |
| COP Tj = Tbiv | 2.74 | 2.21 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.08 kW | 7.07 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.35 | 1.96 |

| | | |
|---|-------------|-------------|
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.67 kW | 1.28 kW |
| Annual energy consumption Qhe | 3729 kWh | 5354 kWh |

EN 12102-1 | Colder Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 138 % | 102 % |
| Prated | 6.86 kW | 8.14 kW |
| SCOP | 3.52 | 2.64 |
| Tbiv | -15 °C | -15 °C |
| TOL | -20 °C | -15 °C |
| Pdh Tj = -7°C | 4.31 kW | 4.73 kW |
| COP Tj = -7°C | 2.90 | 2.15 |
| Cdh Tj = -7 °C | 0.99 | 1.00 |
| Pdh Tj = +2°C | 3.62 kW | 3.34 kW |
| COP Tj = +2°C | 4.27 | 3.31 |
| Cdh Tj = +2 °C | 0.98 | 0.98 |
| Pdh Tj = +7°C | 4.44 kW | 4.42 kW |
| COP Tj = +7°C | 5.64 | 4.75 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 5.08 kW | 5.18 kW |
| COP Tj = 12°C | 6.87 | 5.33 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 5.60 kW | 6.64 kW |
| COP Tj = Tbiv | 2.16 | 1.70 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.80 kW | 6.64 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.05 | 1.70 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |

| | | |
|--|-------------|-------------|
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 6.86 kW | 8.14 kW |
| Annual energy consumption Q _{he} | 4798 kWh | 7612 kWh |
| P _{dh} T _j = -15°C (if TOL | 5.60 | 6.64 |
| COP T _j = -15°C (if TOL | 2.16 | 1.70 |
| C _{dh} T _j = -15 °C | 1.00 | 1.00 |

EN 12102-1 | Warmer Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Warmer Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η _s | 214 % | 156 % |
| Prated | 8.03 kW | 7.39 kW |
| SCOP | 5.43 | 3.97 |
| T _{biv} | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| P _{dh} T _j = +2°C | 8.03 kW | 7.39 kW |
| COP T _j = +2°C | 3.28 | 2.05 |
| C _{dh} T _j = +2 °C | 1.00 | 1.00 |
| P _{dh} T _j = +7°C | 5.51 kW | 5.16 kW |
| COP T _j = +7°C | 4.97 | 3.39 |
| C _{dh} T _j = +7 °C | 0.98 | 0.99 |
| P _{dh} T _j = 12°C | 5.41 kW | 5.40 kW |
| COP T _j = 12°C | 6.62 | 5.28 |
| C _{dh} T _j = +12 °C | 0.98 | 0.98 |
| P _{dh} T _j = T _{biv} | 8.03 kW | 7.39 kW |
| COP T _j = T _{biv} | 3.28 | 2.05 |
| P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 8.03 kW | 7.39 kW |
| COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh} | 3.28 | 2.05 |
| C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 1.00 | 1.00 |
| WTOL | 60 °C | 60 °C |
| P _{off} | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |

| | | |
|---|------------|-------------|
| Annual energy consumption Q _{he} | 1976 kWh | 2490 kWh |
| EN 14825 Cooling | | |
| | +7°C/+12°C | +18°C/+23°C |
| P _{designc} | 7.69 kW | 8.44 kW |
| SEER | 3.78 | 5.60 |
| P _{dc Tj = 35°C} | 7.69 kW | 8.44 kW |
| EER T _j = 35°C | 2.35 | 3.54 |
| C _{dc Tj = 35 °C} | 1.000 | 1.000 |
| P _{dc Tj = 30°C} | 5.34 kW | 5.98 kW |
| EER T _j = 30°C | 3.33 | 4.81 |
| C _{dc Tj = 30 °C} | 1.000 | 1.000 |
| P _{dc Tj = 25°C} | 3.32 kW | 4.48 kW |
| EER T _j = 25°C | 4.16 | 6.35 |
| C _{dc Tj = 25 °C} | 1.000 | 0.974 |
| P _{dc Tj = 20°C} | 3.65 kW | 4.82 kW |
| EER T _j = 20°C | 5.11 | 7.87 |
| C _{dc Tj = 20 °C} | 0.974 | 0.970 |
| P _{off} | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Q _{ce} | 1220 kWh | 904 kWh |

Model VWL 105/7.2 AS 230V S3 + VWL 107/7.2 IS S1

| | |
|-------------------------------------|--|
| Model name | VWL 105/7.2 AS 230V S3 + VWL 107/7.2 IS S1 |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | Warmer, Warmer Climate |
| Heat Source | Outdoor Air |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

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 | 9.85 kW | 7.40 kW |
| El input | 2.11 kW | 2.32 kW |
| COP | 4.68 | 3.19 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 3.00 kW | 1.90 kW |
| Cooling capacity | 7.32 | 7.16 |
| EER | 2.44 | 3.76 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 39 dB(A) | 39 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 177 % | 130 % |
| Prated | 6.08 kW | 7.07 kW |
| SCOP | 4.51 | 3.33 |

| | | |
|---|----------|----------|
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 6.86 kW | 7.38 kW |
| COP Tj = -7°C | 2.80 | 2.24 |
| Cdh Tj = -7 °C | 0.990 | 0.990 |
| Pdh Tj = +2°C | 4.10 kW | 4.39 kW |
| COP Tj = +2°C | 4.43 | 3.10 |
| Cdh Tj = +2 °C | 0.980 | 0.990 |
| Pdh Tj = +7°C | 4.47 kW | 4.45 kW |
| COP Tj = +7°C | 6.09 | 4.51 |
| Cdh Tj = +7 °C | 0.970 | 0.980 |
| Pdh Tj = 12°C | 5.12 kW | 5.34 kW |
| COP Tj = 12°C | 7.95 | 6.07 |
| Cdh Tj = +12 °C | 0.970 | 0.980 |
| Pdh Tj = Tbiv | 6.08 kW | 7.07 kW |
| COP Tj = Tbiv | 2.40 | 1.98 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.08 kW | 7.07 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.40 | 1.98 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000 | 1.000 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | n/a | n/a |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 2787 kWh | 4379 kWh |

EN 12102-1 | Warmer Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 39 dB(A) | 39 dB(A) |
| Sound power level outdoor | 63 dB(A) | 63 dB(A) |

EN 14825 | Warmer Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 225 % | 162 % |
| Prated | 8.03 kW | 7.39 kW |
| SCOP | 5.71 | 4.12 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 8.03 kW | 7.39 kW |
| COP Tj = +2°C | 3.35 | 2.08 |
| Cdh Tj = +2 °C | 1.000 | 1.000 |

| | | |
|---|----------|----------|
| Pdh Tj = +7°C | 5.51 kW | 5.16 kW |
| COP Tj = +7°C | 5.21 | 3.50 |
| Cdh Tj = +7 °C | 0.980 | 0.990 |
| Pdh Tj = 12°C | 5.41 kW | 5.40 kW |
| COP Tj = 12°C | 7.05 | 5.55 |
| Cdh Tj = +12 °C | 0.970 | 0.980 |
| Pdh Tj = Tbiv | 8.03 kW | 7.39 kW |
| COP Tj = Tbiv | 3.35 | 2.08 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.03 kW | 7.39 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.35 | 2.08 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000 | 1.000 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | n/a | n/a |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 1878 kWh | 2396 kWh |

EN 14825 | Cooling

| | | |
|-------------------------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | 7.69 kW | 8.44 kW |
| SEER | 3.97 | 5.94 |
| Pdc Tj = 35°C | 7.69 kW | 8.44 kW |
| EER Tj = 35°C | 2.39 | 3.61 |
| Cdc Tj = 35 °C | 1.000 | 1.000 |
| Pdc Tj = 30°C | 5.34 kW | 5.98 kW |
| EER Tj = 30°C | 3.43 | 5.01 |
| Cdc Tj = 30 °C | 1.000 | 1.000 |
| Pdc Tj = 25°C | 3.32 kW | 4.48 kW |
| EER Tj = 25°C | 4.44 | 6.84 |
| Cdc Tj = 25 °C | 1.000 | 0.972 |
| Pdc Tj = 20°C | 3.65 kW | 4.82 kW |
| EER Tj = 20°C | 5.50 | 8.57 |
| Cdc Tj = 20 °C | 0.972 | 0.967 |
| Poff | 15 W | 15 W |
| PTO | 20 W | 20 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1161 kWh | 853 kWh |