

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | | |
|----------------------------|---|----------|------------|
| Summary of | THZ 5.5/8.5/504 | Reg. No. | 011-1W0050 |
| Certificate Holder | | | |
| Name | tecalor GmbH | | |
| Address | Fürstenbergerstr. 77 | Zip | 37603 |
| City | Holzminen | Country | Germany |
| Certification Body | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH | | |
| Name of testing laboratory | Universität Stuttgart Institut für GebäudeEnergetik | | |
| Subtype title | THZ 5.5/8.5/504 | | |
| Heat Pump Type | Outdoor Air/Water | | |
| Refrigerant | R410a | | |
| Mass Of Refrigerant | 2.95 kg | | |

Model: THZ 504

General Data

| | |
|--------------|-------------|
| Power supply | 1x230V 50Hz |
|--------------|-------------|

Heating

EN 14511-2

| | Low temperature | Medium temperature |
|------------------------|------------------------|------------------------|
| Heat output | 4.40 kW | 3.84 kW |
| El input | 0.93 kW | 1.44 kW |
| COP | 4.74 | 2.66 |
| Indoor water flow rate | 0.77 m ³ /h | 0.42 m ³ /h |

EN 14511-4

| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed |
|--|--------|
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

| | Low temperature | Medium temperature |
|--------------------------|-----------------|--------------------|
| Sound power level indoor | 50 dB(A) | 50 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| η_s | 163 % | 128 % |
| Prated | 10.00 kW | 7.00 kW |
| SCOP | 4.14 | 3.27 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.42 kW | 5.87 kW |
| COP Tj = -7°C | 2.76 | 2.26 |
| Pdh Tj = +2°C | 5.12 kW | 3.52 kW |
| COP Tj = +2°C | 3.94 | 3.27 |
| Pdh Tj = +7°C | 3.26 kW | 2.72 kW |
| COP Tj = +7°C | 5.53 | 4.14 |
| Pdh Tj = 12°C | 3.35 kW | 3.20 kW |
| COP Tj = 12°C | 7.09 | 5.29 |
| Pdh Tj = Tbiv | 8.42 kW | 5.87 kW |
| COP Tj = Tbiv | 2.76 | 2.26 |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| Pdh Tj = TOL | 8.37 kW | 2.67 kW |
| COP Tj = TOL | 2.69 | 1.88 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 1.15 kW | 3.97 kW |
| Annual energy consumption Qhe | 4755 kWh | 4199 kWh |

Warmer Climate

| EN 12102-1 | | |
|--------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 50 dB(A) | 50 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 207 % | 150 % |
| Prated | 9.00 kW | 8.00 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| SCOP | 5.24 | 3.82 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 8.81 kW | 8.32 kW |
| COP Tj = +2°C | 3.18 | 2.34 |
| Pdh Tj = +7°C | 5.77 kW | 5.41 kW |
| COP Tj = +7°C | 4.57 | 3.26 |
| Pdh Tj = 12°C | 3.34 kW | 3.17 kW |
| COP Tj = 12°C | 6.89 | 5.11 |
| Pdh Tj = Tbiv | 8.81 kW | 8.32 kW |
| COP Tj = Tbiv | 3.18 | 2.34 |
| Pdh Tj = TOL | 8.81 kW | 8.32 kW |
| COP Tj = TOL | 3.18 | 2.34 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|---|----------|----------|
| Annual energy consumption Q _{he} | 2243 kWh | 2911 kWh |
|---|----------|----------|

Colder Climate

| EN 12102-1 | | |
|--------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 50 dB(A) | 50 dB(A) |

| EN 14825 | | |
|---------------------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 131 % | 102 % |
| Prated | 14.00 kW | 11.00 kW |
| SCOP | 3.34 | 2.62 |
| T _{biv} | -7 °C | -7 °C |
| TOL | -20 °C | -13 °C |
| P _{dh} T _j = -7°C | 8.62 kW | 6.38 kW |
| COP T _j = -7°C | 2.96 | 2.50 |
| P _{dh} T _j = +2°C | 5.28 kW | 3.92 kW |
| COP T _j = +2°C | 4.20 | 3.48 |
| P _{dh} T _j = +7°C | 3.42 kW | 2.79 kW |
| COP T _j = +7°C | 5.87 | 4.68 |
| P _{dh} T _j = 12°C | 3.35 kW | 3.24 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| COP Tj = 12°C | 7.12 | 5.67 |
| Pdh Tj = Tbiv | 8.62 kW | 6.38 kW |
| COP Tj = Tbiv | 2.56 | 2.50 |
| Pdh Tj = TOL | 5.73 kW | 2.58 kW |
| COP Tj = TOL | 2.56 | 6.38 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 14.24 kW | 10.57 kW |
| Annual energy consumption Qhe | 10498 kWh | 9932 kWh |

Model: THZ 5.5 eco

General Data

| | |
|--------------|-------------|
| Power supply | 1x230V 50Hz |
|--------------|-------------|

Heating

EN 14511-2

| | Low temperature | Medium temperature |
|------------------------|------------------------|------------------------|
| Heat output | 4.40 kW | 3.84 kW |
| El input | 0.93 kW | 1.44 kW |
| COP | 4.74 | 2.66 |
| Indoor water flow rate | 0.77 m ³ /h | 0.42 m ³ /h |

EN 14511-4

| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed |
|--|--------|
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 52 dB(A) | 52 dB(A) |
| Sound power level outdoor | 52 dB(A) | 52 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| η_s | 154 % | 121 % |
| Prated | 6.00 kW | 6.00 kW |
| SCOP | 3.92 | 3.11 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5.48 kW | 5.54 kW |
| COP Tj = -7°C | 2.93 | 2.26 |
| Pdh Tj = +2°C | 3.28 kW | 3.41 kW |
| COP Tj = +2°C | 4.18 | 3.27 |
| Pdh Tj = +7°C | 2.86 kW | 2.71 kW |
| COP Tj = +7°C | 5.43 | 4.09 |
| Pdh Tj = 12°C | 3.34 kW | 3.19 kW |
| COP Tj = 12°C | 6.96 | 5.29 |
| Pdh Tj = Tbiv | 5.48 kW | 5.54 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| COP Tj = Tbiv | 2.93 | 2.26 |
| Pdh Tj = TOL | 5.48 kW | 2.67 kW |
| COP Tj = TOL | 2.82 | 1.88 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 0.75 kW | 3.55 kW |
| Annual energy consumption Qhe | 3280 kWh | 4138 kWh |

Warmer Climate

| EN 12102-1 | | |
|---------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 52 dB(A) | 52 dB(A) |
| Sound power level outdoor | 52 dB(A) | 52 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| | | |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|---------------|---------|---------|
| η_s | 178 % | 134 % |
| Prated | 7.00 kW | 7.00 kW |
| SCOP | 4.53 | 3.42 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 6.70 kW | 6.89 kW |
| COP Tj = +2°C | 3.38 | 2.50 |
| Pdh Tj = +7°C | 4.31 kW | 4.47 kW |
| COP Tj = +7°C | 4.81 | 3.28 |
| Pdh Tj = 12°C | 3.32 kW | 3.16 kW |
| COP Tj = 12°C | 6.73 | 4.98 |
| Pdh Tj = Tbiv | 6.70 kW | 6.68 kW |
| COP Tj = Tbiv | 3.38 | 2.50 |
| Pdh Tj = TOL | 6.70 kW | 6.89 kW |
| COP Tj = TOL | 3.38 | 2.50 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Q _{he} | 1977 kWh | 2694 kWh |

Colder Climate

| EN 12102-1 | | |
|---------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 52 dB(A) | 52 dB(A) |
| Sound power level outdoor | 52 dB(A) | 52 dB(A) |

| EN 14825 | | |
|---------------------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 135 % | 101 % |
| Prated | 9.00 kW | 9.00 kW |
| SCOP | 3.45 | 2.60 |
| T _{biv} | -7 °C | -7 °C |
| TOL | -20 °C | -13 °C |
| P _{dh} T _j = -7°C | 5.57 kW | 5.31 kW |
| COP T _j = -7°C | 3.14 | 2.52 |
| P _{dh} T _j = +2°C | 3.45 kW | 3.28 kW |
| COP T _j = +2°C | 4.51 | 3.50 |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| Pdh Tj = +7°C | 2.89 kW | 2.78 kW |
| COP Tj = +7°C | 5.78 | 4.56 |
| Pdh Tj = 12°C | 3.34 kW | 3.23 kW |
| COP Tj = 12°C | 6.96 | 5.59 |
| Pdh Tj = Tbiv | 5.57 kW | 5.31 kW |
| COP Tj = Tbiv | 3.14 | 2.52 |
| Pdh Tj = TOL | 4.36 kW | 2.58 kW |
| COP Tj = TOL | 2.55 | 2.09 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 9.52 kW | 8.76 kW |
| Annual energy consumption Qhe | 6605 kWh | 8311 kWh |

Model: THZ 5.5 flex

General Data

| | |
|--------------|-------------|
| Power supply | 1x230V 50Hz |
|--------------|-------------|

Heating

EN 14511-2

| | Low temperature | Medium temperature |
|------------------------|------------------------|------------------------|
| Heat output | 4.40 kW | 3.84 kW |
| El input | 0.93 kW | 1.44 kW |
| COP | 4.74 | 2.66 |
| Indoor water flow rate | 0.77 m ³ /h | 0.42 m ³ /h |

EN 14511-4

| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed |
|--|--------|
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

| | Low temperature | Medium temperature |
|--------------------------|-----------------|--------------------|
| Sound power level indoor | 52 dB(A) | 52 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| η_s | 154 % | 121 % |
| Prated | 6.00 kW | 6.00 kW |
| SCOP | 3.92 | 3.11 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5.48 kW | 5.54 kW |
| COP Tj = -7°C | 2.93 | 2.26 |
| Pdh Tj = +2°C | 3.28 kW | 3.41 kW |
| COP Tj = +2°C | 4.18 | 3.27 |
| Pdh Tj = +7°C | 2.86 kW | 2.71 kW |
| COP Tj = +7°C | 5.43 | 4.09 |
| Pdh Tj = 12°C | 3.34 kW | 3.19 kW |
| COP Tj = 12°C | 6.96 | 5.26 |
| Pdh Tj = Tbiv | 5.48 kW | 5.54 kW |
| COP Tj = Tbiv | 2.93 | 2.26 |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| Pdh Tj = TOL | 5.47 kW | 2.67 kW |
| COP Tj = TOL | 2.82 | 1.88 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 0.75 kW | 3.55 kW |
| Annual energy consumption Qhe | 3280 kWh | 4138 kWh |

Warmer Climate

| EN 12102-1 | | |
|--------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 52 dB(A) | 52 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 178 % | 134 % |
| Prated | 7.00 kW | 7.00 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| SCOP | 4.53 | 3.42 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 6.70 kW | 6.89 kW |
| COP Tj = +2°C | 3.38 | 2.50 |
| Pdh Tj = +7°C | 4.31 kW | 4.47 kW |
| COP Tj = +7°C | 4.81 | 3.28 |
| Pdh Tj = 12°C | 3.32 kW | 3.16 kW |
| COP Tj = 12°C | 6.73 | 4.98 |
| Pdh Tj = Tbiv | 6.70 kW | 6.89 kW |
| COP Tj = Tbiv | 3.38 | 2.50 |
| Pdh Tj = TOL | 6.70 kW | 6.89 kW |
| COP Tj = TOL | 3.38 | 2.50 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|---|----------|----------|
| Annual energy consumption Q _{he} | 1977 kWh | 2694 kWh |
|---|----------|----------|

Colder Climate

| EN 12102-1 | | |
|--------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 52 dB(A) | 52 dB(A) |

| EN 14825 | | |
|---------------------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 135 % | 101 % |
| Prated | 9.00 kW | 9.00 kW |
| SCOP | 3.45 | 2.60 |
| T _{biv} | -7 °C | -7 °C |
| TOL | -20 °C | -13 °C |
| P _{dh} T _j = -7°C | 5.57 kW | 5.31 kW |
| COP T _j = -7°C | 3.14 | 2.52 |
| P _{dh} T _j = +2°C | 3.45 kW | 3.28 kW |
| COP T _j = +2°C | 4.51 | 3.50 |
| P _{dh} T _j = +7°C | 2.89 kW | 2.78 kW |
| COP T _j = +7°C | 5.78 | 4.56 |
| P _{dh} T _j = 12°C | 3.34 kW | 3.23 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| COP Tj = 12°C | 6.96 | 5.59 |
| Pdh Tj = Tbiv | 5.57 kW | 5.31 kW |
| COP Tj = Tbiv | 3.14 | 2.52 |
| Pdh Tj = TOL | 4.36 kW | 2.58 kW |
| COP Tj = TOL | 2.55 | 2.09 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 9.25 kW | 8.76 kW |
| Annual energy consumption Qhe | 6605 kWh | 8311 kWh |

Model: THZ 5.5 SOL

General Data

| | |
|--------------|-------------|
| Power supply | 1x230V 50Hz |
|--------------|-------------|

Heating

EN 14511-2

| | Low temperature | Medium temperature |
|------------------------|------------------------|------------------------|
| Heat output | 4.40 kW | 3.84 kW |
| El input | 0.93 kW | 1.44 kW |
| COP | 4.74 | 2.66 |
| Indoor water flow rate | 0.77 m ³ /h | 0.42 m ³ /h |

EN 14511-4

| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed |
|--|--------|
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

| | Low temperature | Medium temperature |
|--------------------------|-----------------|--------------------|
| Sound power level indoor | 50 dB(A) | 50 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| η_s | 165 % | 129 % |
| Prated | 6.00 kW | 6.00 kW |
| SCOP | 4.21 | 3.29 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5.48 kW | 5.54 kW |
| COP Tj = -7°C | 2.93 | 2.26 |
| Pdh Tj = +2°C | 3.28 kW | 3.41 kW |
| COP Tj = +2°C | 4.18 | 3.27 |
| Pdh Tj = +7°C | 2.86 kW | 2.71 kW |
| COP Tj = +7°C | 5.43 | 4.09 |
| Pdh Tj = 12°C | 3.34 kW | 3.19 kW |
| COP Tj = 12°C | 6.96 | 5.26 |
| Pdh Tj = Tbiv | 5.48 kW | 5.54 kW |
| COP Tj = Tbiv | 2.93 | 2.26 |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| Pdh Tj = TOL | 5.47 kW | 2.67 kW |
| COP Tj = TOL | 2.82 | 1.88 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 0.75 kW | 3.55 kW |
| Annual energy consumption Qhe | 3052 kWh | 3910 kWh |

Warmer Climate

| EN 12102-1 | | |
|--------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 50 dB(A) | 50 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 207 % | 149 % |
| Prated | 7.00 kW | 7.00 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| SCOP | 5.25 | 3.80 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 6.70 kW | 6.89 kW |
| COP Tj = +2°C | 3.38 | 2.50 |
| Pdh Tj = +7°C | 4.31 kW | 4.47 kW |
| COP Tj = +7°C | 4.81 | 3.28 |
| Pdh Tj = 12°C | 3.32 kW | 3.16 kW |
| COP Tj = 12°C | 6.73 | 4.98 |
| Pdh Tj = Tbiv | 6.70 kW | 6.89 kW |
| COP Tj = Tbiv | 3.38 | 2.50 |
| Pdh Tj = TOL | 6.70 kW | 6.89 kW |
| COP Tj = TOL | 3.38 | 2.50 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|------------------------------------|----------|----------|
| Annual energy consumption Q_{he} | 1704 kWh | 2420 kWh |
|------------------------------------|----------|----------|

Colder Climate

| EN 12102-1 | | |
|--------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 50 dB(A) | 50 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 138 % | 103 % |
| Prated | 9.00 kW | 9.00 kW |
| SCOP | 3.53 | 2.64 |
| Tbiv | -7 °C | -7 °C |
| TOL | -20 °C | -13 °C |
| Pdh Tj = -7°C | 5.57 kW | 5.31 kW |
| COP Tj = -7°C | 3.14 | 2.52 |
| Pdh Tj = +2°C | 3.45 kW | 3.28 kW |
| COP Tj = +2°C | 4.51 | 3.50 |
| Pdh Tj = +7°C | 2.89 kW | 2.78 kW |
| COP Tj = +7°C | 5.78 | 4.56 |
| Pdh Tj = 12°C | 3.34 kW | 3.23 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| COP Tj = 12°C | 6.96 | 5.59 |
| Pdh Tj = Tbiv | 5.57 kW | 5.31 kW |
| COP Tj = Tbiv | 3.14 | 2.52 |
| Pdh Tj = TOL | 4.36 kW | 2.58 kW |
| COP Tj = TOL | 2.55 | 2.09 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 9.25 kW | 8.76 kW |
| Annual energy consumption Qhe | 6468 kWh | 8174 kWh |

Model: THZ 5.5 eco DHW

General Data

| | |
|--------------|-------------|
| Power supply | 1x230V 50Hz |
|--------------|-------------|

Heating

EN 14511-2

| | Medium temperature |
|------------------------|------------------------|
| Heat output | 3.84 kW |
| El input | 1.44 kW |
| COP | 2.66 |
| Indoor water flow rate | 0.42 m ³ /h |

EN 14511-4

| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed |
|--|--------|
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

| | Medium temperature |
|--------------------------|--------------------|
| Sound power level indoor | 52 dB(A) |

EN 14825

| | Medium temperature |
|---------------|--------------------|
| η_s | 121 % |
| Prated | 6.00 kW |
| SCOP | 3.11 |
| Tbiv | -7 °C |
| TOL | -10 °C |
| Pdh Tj = -7°C | 5.54 kW |
| COP Tj = -7°C | 2.26 |
| Pdh Tj = +2°C | 3.41 kW |
| COP Tj = +2°C | 3.27 |
| Pdh Tj = +7°C | 2.71 kW |
| COP Tj = +7°C | 4.09 |
| Pdh Tj = 12°C | 3.19 kW |
| COP Tj = 12°C | 5.29 |
| Pdh Tj = Tbiv | 5.54 kW |
| COP Tj = Tbiv | 2.26 |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | |
|--|-------------|
| Pdh Tj = TOL | 2.67 kW |
| COP Tj = TOL | 1.88 |
| Cdh | 0.98 |
| WTOL | 60 °C |
| Poff | 27 W |
| PTO | 63 W |
| PSB | 27 W |
| PCK | 35 W |
| Supplementary Heater: Type of energy input | electricity |
| Supplementary Heater: PSUP | 3.55 kW |
| Annual energy consumption Qhe | 4138 kWh |

Domestic Hot Water (DHW)

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

| EN 16147 | |
|---------------------------------|-------------|
| Declared load profile | XL |
| COP | 2.70 |
| Heating up time | 02:06 h:min |
| Standby power input | 132.0 W |
| Reference hot water temperature | 57.0 °C |
| Mixed water at 40°C | 352 l |
| Efficiency η_{DHW} | 111 % |

Model: THZ 504 DHW

General Data

| | |
|--------------|-------------|
| Power supply | 1x230V 50Hz |
|--------------|-------------|

Heating

EN 14511-2

| | Medium temperature |
|------------------------|------------------------|
| Heat output | 3.84 kW |
| El input | 1.44 kW |
| COP | 2.66 |
| Indoor water flow rate | 0.42 m ³ /h |

EN 14511-4

| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed |
|--|--------|
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

| | Medium temperature |
|--------------------------|--------------------|
| Sound power level indoor | 50 dB(A) |

EN 14825

| | Medium temperature |
|---------------|--------------------|
| η_s | 128 % |
| Prated | 7.00 kW |
| SCOP | 3.27 |
| Tbiv | -7 °C |
| TOL | -10 °C |
| Pdh Tj = -7°C | 5.87 kW |
| COP Tj = -7°C | 2.26 |
| Pdh Tj = +2°C | 3.52 kW |
| COP Tj = +2°C | 3.27 |
| Pdh Tj = +7°C | 2.72 kW |
| COP Tj = +7°C | 4.14 |
| Pdh Tj = 12°C | 3.20 kW |
| COP Tj = 12°C | 5.29 |
| Pdh Tj = Tbiv | 5.87 kW |
| COP Tj = Tbiv | 2.26 |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | |
|--|-------------|
| Pdh Tj = TOL | 2.67 kW |
| COP Tj = TOL | 1.88 |
| Cdh | 0.98 |
| WTOL | 60 °C |
| Poff | 27 W |
| PTO | 63 W |
| PSB | 27 W |
| PCK | 35 W |
| Supplementary Heater: Type of energy input | electricity |
| Supplementary Heater: PSUP | 3.97 kW |
| Annual energy consumption Qhe | 4199 kWh |

Domestic Hot Water (DHW)

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

| EN 16147 | |
|---------------------------------|-------------|
| Declared load profile | XL |
| COP | 2.70 |
| Heating up time | 02:06 h:min |
| Standby power input | 132.0 W |
| Reference hot water temperature | 57.0 °C |
| Mixed water at 40°C | 352 l |
| Efficiency η_{DHW} | 111 % |

Model: THZ 5.5 SOL DHW

General Data

| | |
|--------------|-------------|
| Power supply | 1x230V 50Hz |
|--------------|-------------|

Heating

EN 14511-2

| | Medium temperature |
|------------------------|------------------------|
| Heat output | 3.84 kW |
| El input | 1.44 kW |
| COP | 2.66 |
| Indoor water flow rate | 0.42 m ³ /h |

EN 14511-4

| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed |
|--|--------|
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |

Average Climate

EN 14825

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | Medium temperature |
|---------------|---------------------------|
| η_s | 121 % |
| Prated | 6.00 kW |
| SCOP | 3.11 |
| Tbiv | -7 °C |
| TOL | -10 °C |
| Pdh Tj = -7°C | 5.54 kW |
| COP Tj = -7°C | 2.26 |
| Pdh Tj = +2°C | 3.41 kW |
| COP Tj = +2°C | 3.27 |
| Pdh Tj = +7°C | 2.71 kW |
| COP Tj = +7°C | 4.09 |
| Pdh Tj = 12°C | 3.19 kW |
| COP Tj = 12°C | 5.29 |
| Pdh Tj = Tbiv | 5.54 kW |
| COP Tj = Tbiv | 2.26 |
| Pdh Tj = TOL | 2.67 kW |
| COP Tj = TOL | 1.88 |
| Cdh | 0.98 |
| WTOL | 60 °C |
| Poff | 27 W |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | |
|--|-------------|
| PTO | 63 W |
| PSB | 27 W |
| PCK | 35 W |
| Supplementary Heater: Type of energy input | electricity |
| Supplementary Heater: PSUP | 3.55 kW |
| Annual energy consumption Q _{he} | 4138 kWh |

| EN 12102-1 | |
|--------------------------|---------------------------|
| | Medium temperature |
| Sound power level indoor | 50 dB(A) |

Domestic Hot Water (DHW)

Average Climate

| EN 16147 | |
|---------------------------------|-------------|
| Declared load profile | XL |
| COP | 2.70 |
| Heating up time | 02:06 h:min |
| Standby power input | 132.0 W |
| Reference hot water temperature | 57.0 °C |
| Mixed water at 40°C | 352 l |
| Efficiency η_{DHW} | 111 % |

Model: THZ 8.5 Flex

General Data

| | |
|--------------|-------------|
| Power supply | 1x230V 50Hz |
|--------------|-------------|

Heating

EN 14511-2

| | Low temperature | Medium temperature |
|------------------------|------------------------|------------------------|
| Heat output | 4.40 kW | 3.84 kW |
| El input | 0.93 kW | 1.44 kW |
| COP | 4.74 | 2.66 |
| Indoor water flow rate | 0.77 m ³ /h | 0.42 m ³ /h |

EN 14511-4

| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed |
|--|--------|
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

| | Low temperature | Medium temperature |
|--------------------------|-----------------|--------------------|
| Sound power level indoor | 52 dB(A) | 52 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| η_s | 155 % | 121 % |
| Prated | 10.00 kW | 7.00 kW |
| SCOP | 3.95 | 3.10 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.42 kW | 5.87 kW |
| COP Tj = -7°C | 2.76 | 2.26 |
| Pdh Tj = +2°C | 5.12 kW | 3.52 kW |
| COP Tj = +2°C | 3.94 | 3.27 |
| Pdh Tj = +7°C | 3.26 kW | 2.72 kW |
| COP Tj = +7°C | 5.53 | 4.14 |
| Pdh Tj = 12°C | 3.35 kW | 3.20 kW |
| COP Tj = 12°C | 7.09 | 5.29 |
| Pdh Tj = Tbiv | 8.42 kW | 5.87 kW |
| COP Tj = Tbiv | 2.76 | 2.26 |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| Pdh Tj = TOL | 8.37 kW | 2.67 kW |
| COP Tj = TOL | 2.69 | 1.88 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 1.15 kW | 3.97 kW |
| Annual energy consumption Qhe | 4982 kWh | 4427 kWh |

Warmer Climate

| EN 12102-1 | | |
|--------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 52 dB(A) | 52 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 184 % | 133 % |
| Prated | 9.00 kW | 8.00 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| SCOP | 4.67 | 3.41 |
| Tbiv | 2 °C | 0 °C |
| TOL | 2 °C | 0 °C |
| Pdh Tj = +2°C | 8.81 kW | 8.32 kW |
| COP Tj = +2°C | 3.18 | 2.34 |
| Pdh Tj = +7°C | 5.77 kW | 5.41 kW |
| COP Tj = +7°C | 4.57 | 3.26 |
| Pdh Tj = 12°C | 3.34 kW | 3.17 kW |
| COP Tj = 12°C | 6.89 | 5.11 |
| Pdh Tj = Tbiv | 8.81 kW | 8.32 kW |
| COP Tj = Tbiv | 3.18 | 2.34 |
| Pdh Tj = TOL | 8.81 kW | 8.32 kW |
| COP Tj = TOL | 3.18 | 2.34 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 24 W | 24 W |
| PTO | 69 W | 69 W |
| PSB | 24 W | 24 W |
| PCK | 55 W | 55 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|------------------------------------|----------|----------|
| Annual energy consumption Q_{he} | 2517 kWh | 3264 kWh |
|------------------------------------|----------|----------|

Colder Climate

| EN 12102-1 | | |
|--------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 52 dB(A) | 52 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 129 % | 100 % |
| Prated | 14.00 kW | 11.00 kW |
| SCOP | 3.30 | 2.58 |
| Tbiv | -7 °C | -7 °C |
| TOL | -20 °C | -13 °C |
| Pdh Tj = -7°C | 8.62 kW | 6.38 kW |
| COP Tj = -7°C | 2.96 | 2.50 |
| Pdh Tj = +2°C | 5.28 kW | 3.92 kW |
| COP Tj = +2°C | 4.20 | 3.48 |
| Pdh Tj = +7°C | 3.42 kW | 2.79 kW |
| COP Tj = +7°C | 5.87 | 4.68 |
| Pdh Tj = 12°C | 3.35 kW | 3.24 kW |

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | |
|--|-------------|-------------|
| COP Tj = 12°C | 7.12 | 5.67 |
| Pdh Tj = Tbiv | 8.62 kW | 6.38 kW |
| COP Tj = Tbiv | 2.56 | 2.50 |
| Pdh Tj = TOL | 5.73 kW | 2.58 kW |
| COP Tj = TOL | 2.56 | 2.09 |
| Cdh | 0.98 | 0.98 |
| WTOL | 60 °C | 60 °C |
| Poff | 27 W | 27 W |
| PTO | 63 W | 63 W |
| PSB | 27 W | 27 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 14.24 kW | 10.57 kW |
| Annual energy consumption Qhe | 10634 kWh | 10109 kWh |