

Subtype THZ 5.5/8.5/504

Certificate Holder	tecalor GmbH
Address	Fürstenbergerstr. 77
ZIP	37603
City	Holzminden
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	THZ 5.5/8.5/504
Registration number	011-1W0050
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	2.95 kg

Model THZ 504

Model name	THZ 504
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
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

EN 14511-2 | Heating

	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

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	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
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.37 kW	2.67 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	131 %	102 %
Prated	14.00 kW	11.00 kW
SCOP	3.34	2.62
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
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 or Pdh Tj = Tdesignh if TOL < Tdesignh	5.73 kW	2.58 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	6.38
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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 Q _{he}	10498 kWh	9932 kWh

EN 12102-1 | Warmer Climate

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

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	207 %	150 %
Prated	9.00 kW	8.00 kW
SCOP	5.24	3.82
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	8.81 kW	8.32 kW
COP T _j = +2°C	3.18	2.34
P _{dh} T _j = +7°C	5.77 kW	5.41 kW
COP T _j = +7°C	4.57	3.26
P _{dh} T _j = 12°C	3.34 kW	3.17 kW
COP T _j = 12°C	6.89	5.11
P _{dh} T _j = T _{biv}	8.81 kW	8.32 kW
COP T _j = T _{biv}	3.18	2.34
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	8.81 kW	8.32 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.18	2.34
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.98	0.98
WTOL	60 °C	60 °C
P _{off}	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
Annual energy consumption Q _{he}	2243 kWh	2911 kWh

Model THZ 5.5 eco

Model name	THZ 5.5 eco
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
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

EN 14511-2 | Heating

	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

EN 12102-1 | Average Climate

	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 | Average Climate

	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
COP Tj = Tbiv	2.93	2.26
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.48 kW	2.67 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	135 %	101 %
Prated	9.00 kW	9.00 kW
SCOP	3.45	2.60
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
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 or Pdh Tj = Tdesignh if TOL < Tdesignh	4.36 kW	2.58 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	2.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
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 or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.89 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.38	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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
Annual energy consumption Qhe	1977 kWh	2694 kWh

Model THZ 5.5 flex

Model name	THZ 5.5 flex
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
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

EN 14511-2 | Heating

	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

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	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 $T_j = T_{biv}$	2.93	2.26
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	5.47 kW	2.67 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.82	1.88
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.98	0.98
WTOL	60 °C	60 °C
P _{off}	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 Q _{he}	3280 kWh	4138 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	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
$P_{dh} T_j = -7^{\circ}C$	5.57 kW	5.31 kW
COP $T_j = -7^{\circ}C$	3.14	2.52
$P_{dh} T_j = +2^{\circ}C$	3.45 kW	3.28 kW
COP $T_j = +2^{\circ}C$	4.51	3.50
$P_{dh} T_j = +7^{\circ}C$	2.89 kW	2.78 kW
COP $T_j = +7^{\circ}C$	5.78	4.56
$P_{dh} T_j = 12^{\circ}C$	3.34 kW	3.23 kW
COP $T_j = 12^{\circ}C$	6.96	5.59
$P_{dh} T_j = T_{biv}$	5.57 kW	5.31 kW
COP $T_j = T_{biv}$	3.14	2.52
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	4.36 kW	2.58 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.55	2.09
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.98	0.98
WTOL	60 °C	60 °C
P _{off}	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 Q _{he}	6605 kWh	8311 kWh

EN 12102-1 | Warmer Climate

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

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	178 %	134 %
Prated	7.00 kW	7.00 kW
SCOP	4.53	3.42
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.70 kW	6.89 kW
COP T _j = +2°C	3.38	2.50
P _{dh} T _j = +7°C	4.31 kW	4.47 kW
COP T _j = +7°C	4.81	3.28
P _{dh} T _j = 12°C	3.32 kW	3.16 kW
COP T _j = 12°C	6.73	4.98
P _{dh} T _j = T _{biv}	6.70 kW	6.89 kW
COP T _j = T _{biv}	3.38	2.50
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	6.70 kW	6.89 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.38	2.50
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.98	0.98
WTOL	60 °C	60 °C
P _{off}	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
Annual energy consumption Q _{he}	1977 kWh	2694 kWh

Model THZ 5.5 SOL

Model name	THZ 5.5 SOL
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
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

EN 14511-2 | Heating

	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

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	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
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.47 kW	2.67 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	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
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 or Pdh Tj = Tdesignh if TOL < Tdesignh	4.36 kW	2.58 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	2.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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 Q _{he}	6468 kWh	8174 kWh

EN 12102-1 | Warmer Climate

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

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	207 %	149 %
Prated	7.00 kW	7.00 kW
SCOP	5.25	3.80
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	6.70 kW	6.89 kW
COP T _j = +2°C	3.38	2.50
P _{dh} T _j = +7°C	4.31 kW	4.47 kW
COP T _j = +7°C	4.81	3.28
P _{dh} T _j = 12°C	3.32 kW	3.16 kW
COP T _j = 12°C	6.73	4.98
P _{dh} T _j = T _{biv}	6.70 kW	6.89 kW
COP T _j = T _{biv}	3.38	2.50
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	6.70 kW	6.89 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.38	2.50
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.98	0.98
WTOL	60 °C	60 °C
P _{off}	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
Annual energy consumption Q _{he}	1704 kWh	2420 kWh

Model THZ 5.5 eco DHW

Model name	THZ 5.5 eco DHW
Application	Heating + DHW
Units	Indoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	111 %
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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	3.84 kW	
El input	1.44 kW	
COP	2.66	

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	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 or Pdh Tj = Tdesignh if TOL < Tdesignh	2.67 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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

Model THZ 504 DHW

Model name	THZ 504 DHW
Application	Heating + DHW
Units	Indoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	111 %
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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	3.84 kW	
El input	1.44 kW	
COP	2.66	

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	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
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.67 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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

Model THZ 5.5 SOL DHW

Model name	THZ 5.5 SOL DHW
Application	Heating + DHW
Units	Indoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	111 %
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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	3.84 kW	
El input	1.44 kW	
COP	2.66	

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	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 or Pdh Tj = Tdesignh if TOL < Tdesignh	2.67 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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

Model THZ 8.5 Flex

Model name	THZ 8.5 Flex
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
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

EN 14511-2 | Heating

	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

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	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
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.37 kW	2.67 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	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
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 or Pdh Tj = Tdesignh if TOL < Tdesignh	5.73 kW	2.58 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	2.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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 Q _{he}	10634 kWh	10109 kWh

EN 12102-1 | Warmer Climate

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

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	184 %	133 %
Prated	9.00 kW	8.00 kW
SCOP	4.67	3.41
T _{biv}	2 °C	0 °C
TOL	2 °C	0 °C
P _{dh} T _j = +2°C	8.81 kW	8.32 kW
COP T _j = +2°C	3.18	2.34
P _{dh} T _j = +7°C	5.77 kW	5.41 kW
COP T _j = +7°C	4.57	3.26
P _{dh} T _j = 12°C	3.34 kW	3.17 kW
COP T _j = 12°C	6.89	5.11
P _{dh} T _j = T _{biv}	8.81 kW	8.32 kW
COP T _j = T _{biv}	3.18	2.34
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	8.81 kW	8.32 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.18	2.34
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.98	0.98
WTOL	60 °C	60 °C
P _{off}	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
Annual energy consumption Q _{he}	2517 kWh	3264 kWh