

Subtype THZ 05.1/07.1

Certificate Holder	tecalor GmbH
Address	Lütztringer Weg 3
ZIP	37603
City	Holzminden
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	THZ 05.1/07.1
Registration number	011-1W1076
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.24 kg
Certification Date	18.07.2025
Testing basis	HP KEYMARK certification scheme rules rev. 14

Model THZ 07.1 IBC topline

Model name	THZ 07.1 IBC topline
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
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 16147 | Average Climate**

Declared load profile	XL
Efficiency η_{DHW}	120 %
COP	3.00
Heating up time	3:28 h:min
Standby power input	57.0 W
Reference hot water temperature	50.8 °C
Mixed water at 40°C	308 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	2.71 kW	2.80 kW
El input	0.63 kW	1.08 kW
COP	4.29	2.59

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	53 dB(A)	53 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	165 %	128 %

Prated	7.23 kW	7.27 kW
SCOP	4.24	3.28
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.39 kW	6.42 kW
COP Tj = -7°C	2.71	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.87 kW	3.99 kW
COP Tj = +2°C	3.97	3.13
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.39 kW	2.45 kW
COP Tj = +7°C	5.77	4.27
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.79 kW	2.64 kW
COP Tj = 12°C	6.97	5.24
Cdh Tj = +12 °C	0.970	0.950
Pdh Tj = Tbiv	6.39 kW	6.42 kW
COP Tj = Tbiv	2.71	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.04 kW	6.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	2.06
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	75 °C	75 °C
Poff	19 W	19 W
PTO	11 W	15 W
PSB	19 W	19 W
PCK	3 W	2 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.19 kW	1.22 kW
Annual energy consumption Qhe	3551 kWh	4573 kWh

Model THZ 07.1 IC flex topline

Model name	THZ 07.1 IC flex topline
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	n/a
Off-peak product	n/a

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

Declared load profile	XL
Efficiency η_{DHW}	120 %
COP	3.00
Heating up time	3:28 h:min
Standby power input	57.0 W
Reference hot water temperature	50.8 °C
Mixed water at 40°C	308 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	2.71 kW	2.80 kW
El input	0.63 kW	1.08 kW
COP	4.29	2.59

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	53 dB(A)	53 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	165 %	128 %

Prated	7.23 kW	7.27 kW
SCOP	4.24	3.28
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.39 kW	6.42 kW
COP Tj = -7°C	2.71	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.87 kW	3.99 kW
COP Tj = +2°C	3.97	3.13
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.39 kW	2.45 kW
COP Tj = +7°C	5.77	4.27
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.79 kW	2.64 kW
COP Tj = 12°C	6.97	5.24
Cdh Tj = +12 °C	0.970	0.950
Pdh Tj = Tbiv	6.39 kW	6.42 kW
COP Tj = Tbiv	2.71	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.04 kW	6.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	2.06
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	75 °C	75 °C
Poff	19 W	19 W
PTO	11 W	15 W
PSB	19 W	19 W
PCK	3 W	2 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.19 kW	1.22 kW
Annual energy consumption Qhe	3551 kWh	4573 kWh

Model THZ 05.1 IBC topline

Model name	THZ 05.1 IBC topline
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
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 16147 | Average Climate**

Declared load profile	XL
Efficiency η_{DHW}	120 %
COP	3.00
Heating up time	3:28 h:min
Standby power input	57.0 W
Reference hot water temperature	50.8 °C
Mixed water at 40°C	308 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	2.26 kW	2.80 kW
El input	0.51 kW	1.08 kW
COP	4.42	2.59

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	53 dB(A)	53 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	168 %	128 %

Prated	5.47 kW	5.44 kW
SCOP	4.28	3.27
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.03 kW	4.90 kW
COP Tj = -7°C	2.90	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.03 kW	3.02 kW
COP Tj = +2°C	4.14	3.13
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.42 kW	2.24 kW
COP Tj = +7°C	5.55	4.19
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.83 kW	2.69 kW
COP Tj = 12°C	6.68	5.32
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	5.03 kW	4.90 kW
COP Tj = Tbiv	2.90	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.74 kW	4.67 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	2.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	75 °C	75 °C
Poff	19 W	19 W
PTO	13 W	15 W
PSB	19 W	19 W
PCK	3 W	2 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.73 kW	0.78 kW
Annual energy consumption Qhe	2643 kWh	3433 kWh

Model THZ 05.1 IB(C) comfort

Model name	THZ 05.1 IB(C) comfort
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
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 16147 | Average Climate**

Declared load profile	XL
Efficiency η_{DHW}	120 %
COP	3.00
Heating up time	3:28 h:min
Standby power input	57.0 W
Reference hot water temperature	50.8 °C
Mixed water at 40°C	308 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	2.26 kW	2.80 kW
El input	0.51 kW	1.08 kW
COP	4.42	2.59

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	53 dB(A)	53 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	168 %	128 %

Prated	5.47 kW	5.44 kW
SCOP	4.28	3.27
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.03 kW	4.90 kW
COP Tj = -7°C	2.90	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.03 kW	3.02 kW
COP Tj = +2°C	4.14	3.13
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.42 kW	2.24 kW
COP Tj = +7°C	5.55	4.19
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.83 kW	2.69 kW
COP Tj = 12°C	6.68	5.32
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	5.03 kW	4.90 kW
COP Tj = Tbiv	2.90	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.74 kW	4.67 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	2.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	75 °C	75 °C
Poff	19 W	19 W
PTO	13 W	15 W
PSB	19 W	19 W
PCK	3 W	2 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.73 kW	0.78 kW
Annual energy consumption Qhe	2643 kWh	3433 kWh