

## Subtype THZ 05.1/07.1

Certificate Holder	tecalor GmbH
Address	Lüchtringer 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 $\eta_{DHW}$	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
$\eta_s$	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 $\eta_{DHW}$	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
$\eta_s$	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 $\eta_{DHW}$	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
$\eta_s$	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 $\eta_{DHW}$	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
$\eta_s$	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