

This information was generated by the HP KEYMARK database on 23 Jun 2022

[Login](#)

Summary of	TTL 25 AC	Reg. No.	011-1W0491
Certificate Holder			
Name	tecalor GmbH		
Address	Fürstenbergerstr. 77	Zip	37603
City	Holzminden	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	TTL 25 AC		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	5.5 kg		
Certification Date	01.11.2016		

Model: TTL 25 AC

Configure model	
Model name	TTL 25 AC
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	7.84 kW	7.36 kW
El input	1.54 kW	2.33 kW
COP	5.09	3.16

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

Average Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	187 %	144 %
Prated	15.00 kW	15.00 kW
SCOP	4.76	3.67
Tbiv	-5 °C	-5 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	12.80 kW	13.80 kW
COP Tj = -7°C	2.98	2.48
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	8.30 kW	8.40 kW
COP Tj = +2°C	4.72	3.51
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	8.00 kW	7.80 kW
COP Tj = +7°C	6.16	4.61
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	9.10 kW	9.00 kW

This information was generated by the HP KEYMARK database on 23 Jun 2022

COP Tj = 12°C	8.11	6.66
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	11.80 kW	12.50 kW
COP Tj = Tbiv	3.16	2.59
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.60 kW	13.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	2.28
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	38 W	38 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.21 kW	0.00 kW
Annual energy consumption Qhe	6513 kWh	8444 kWh

Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_s	246 %	177 %
Prated	8.00 kW	8.00 kW
SCOP	6.22	4.51

This information was generated by the HP KEYMARK database on 23 Jun 2022

Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.30 kW	8.40 kW
COP Tj = +2°C	4.14	2.74
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	7.90 kW	7.50 kW
COP Tj = +7°C	5.47	3.64
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	9.10 kW	9.00 kW
COP Tj = 12°C	7.72	6.11
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	8.30 kW	8.40 kW
COP Tj = Tbiv	4.14	2.74
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.90 kW	18.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	2.31
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	38 W	38 W
Supplementary Heater: Type of energy input	Electricity	Electricity

This information was generated by the HP KEYMARK database on 23 Jun 2022

Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	1718 kWh	2369 kWh

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_s	160 %	131 %
Prated	21.00 kW	22.00 kW
SCOP	4.08	3.35
T _{biv}	-10 °C	-10 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	12.60 kW	13.30 kW
COP T _j = -7°C	3.13	2.67
C _{dh} T _j = -7 °C	1.00	1.00
P _{dh} T _j = +2°C	8.30 kW	8.30 kW
COP T _j = +2°C	5.15	3.92
C _{dh} T _j = +2 °C	1.00	1.00
P _{dh} T _j = +7°C	8.00 kW	7.90 kW
COP T _j = +7°C	6.57	5.12
C _{dh} T _j = +7 °C	1.00	1.00
P _{dh} T _j = 12°C	9.10 kW	9.00 kW

This information was generated by the HP KEYMARK database on 23 Jun 2022

COP Tj = 12°C	8.11	6.95
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	14.10 kW	15.20 kW
COP Tj = Tbiv	2.90	2.53
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.70 kW	18.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.66	2.37
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	38 W	38 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	20.59 kW	22.15 kW
Annual energy consumption Qhe	12690 kWh	16179 kWh
Pdh Tj = -15°C (if TOL<-20°C)	16.70	18.30
COP Tj = -15°C (if TOL<-20°C)	2.66	2.37
Cdh Tj = -15 °C	1.00	1.00