

This information was generated by the HP KEYMARK database on 21 Jun 2022

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Summary of	TTF 27 HT	Reg. No.	011-1W0187
Certificate Holder			
Name	tecalor GmbH		
Address	Fürstenbergerstr. 77	Zip	37603
City	Holzminden	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	TTF 27 HT		
Heat Pump Type	Brine/Water		
Refrigerant	R134a		
Mass of Refrigerant	6 kg		
Certification Date	04.09.2019		

## Model: TTF 27 HT

Configure model	
Model name	TTF 27 HT
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	27.41 kW	25.10 kW
El input	6.32 kW	8.49 kW
COP	4.34	2.95

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

### Average Climate

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### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	60 dB(A)	64 dB(A)
Sound power level outdoor	60 dB(A)	64 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	175 %	131 %
Prated	27.00 kW	25.00 kW
SCOP	4.58	4.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	27.50 kW	25.30 kW
COP Tj = -7°C	4.38	3.06
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	27.70 kW	26.10 kW
COP Tj = +2°C	4.59	3.48
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	27.90 kW	26.60 kW
COP Tj = +7°C	4.80	3.78
Cdh Tj = +7 °C	0.90	

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Pdh Tj = 12°C	28.20 kW	27.10 kW
COP Tj = 12°C	5.03	4.12
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	27.40 kW	25.10 kW
COP Tj = Tbiv	4.34	2.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	27.40 kW	25.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.34	2.96
WTOL	75 °C	75 °C
Poff	0 W	0 W
PTO	3 W	3 W
PSB	3 W	3 W
PCK	46 W	46 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	12359 kWh	14872 kWh

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	174 %	131 %
Prated	27.00 kW	25.00 kW

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SCOP	4.58	4.58
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	27.40 kW	25.10 kW
COP Tj = +2°C	4.34	2.96
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	27.70 kW	25.80 kW
COP Tj = +7°C	4.55	3.29
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	28.00 kW	26.80 kW
COP Tj = 12°C	4.88	3.89
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	27.40 kW	25.10 kW
COP Tj = Tbiv	4.34	2.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	27.40 kW	25.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.34	2.96
WTOL	75 °C	75 °C
Poff	0 W	0 W
PTO	3 W	3 W
PSB	3 W	3 W
PCK	46 W	46 W

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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	8031 kWh	9675 kWh

## Colder Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	180 %	136 %
Prated	34.00 kW	32.00 kW
SCOP	4.58	4.58
T <sub>biv</sub>	-15 °C	-15 °C
TOL	-22 °C	-22 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	27.80 kW	26.10 kW
COP T <sub>j</sub> = -7°C	4.70	3.46
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.90	0.90
P <sub>dh</sub> T <sub>j</sub> = +2°C	28.00 kW	26.60 kW
COP T <sub>j</sub> = +2°C	4.86	3.77
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.90	0.90
P <sub>dh</sub> T <sub>j</sub> = +7°C	28.10 kW	27.00 kW
COP T <sub>j</sub> = +7°C	5.00	4.05
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.90	0.90

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Pdh Tj = 12°C	28.20 kW	27.30 kW
COP Tj = 12°C	5.02	4.28
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	27.80 kW	25.00 kW
COP Tj = Tbiv	4.63	3.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	27.40 kW	25.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.34	2.96
WTOL	75 °C	75 °C
Poff	0 W	0 W
PTO	3 W	3 W
PSB	3 W	3 W
PCK	46 W	46 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.61 kW	6.52 kW
Annual energy consumption Qhe	17849 kWh	21670 kWh
Pdh Tj = -15°C (if TOL<-20°C)	27.80	25.00
COP Tj = -15°C (if TOL<-20°C)	4.63	3.29
Cdh Tj = -15 °C	0.90	0.90