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Login

Summary of	TTF 4.6, TTF 6.6, TTF 8.6	Reg. No.	011-1W0396
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 4.6, TTF 6.6, TTF 8.6		
Heat Pump Type	Brine/Water		
Refrigerant	R454C		
Mass of Refrigerant	2.2 kg		
Certification Date	08.09.2020		



Model: TTF 4.6 (cool) / TTC 4.6 (cool)

Configure model		
Model name	TTF 4.6 (cool) / TTC 4.6 (cool)	
Application	Heating (medium temp)	
Units	Indoor	
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	1.96 kW	1.26 kW	
El input	0.43 kW	0.47 kW	
СОР	4.60	2.73	

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

Warmer Climate





EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	38 dB(A)	38 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	187 %	147 %
Prated	4.23 kW	3.76 kW
SCOP	4.87	3.87
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.23 kW	3.76 kW
COP Tj = +2°C	4.86	3.43
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.71 kW	2.41 kW
COP Tj = +7°C	5.24	3.95
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.20 kW	1.08 kW
COP Tj = 12°C	5.31	4.39
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.23 kW	3.76 kW





	<u> </u>	<u> </u>
COP Tj = Tbiv	4.86	3.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.23 kW	3.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.86	3.43
WTOL	75 °C	75 °C
Poff	16 W	16 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1159 kWh	1300 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	38 dB(A)	38 dB(A)	

	EN 14825		
Low temperature	Medium temperature		
201 %	157 %		
4.23 kW	3.76 kW		
_	201 %		





SCOP	5.21	4.12
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.55 kW	2.27 kW
$COP Tj = -7^{\circ}C$	5.37	4.10
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = $+2^{\circ}$ C	1.55 kW	1.38 kW
$COP Tj = +2^{\circ}C$	5.45	4.37
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	1.13 kW	1.09 kW
$COP Tj = +7^{\circ}C$	5.31	4.51
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.12 kW	1.09 kW
COP Tj = 12°C	5.21	4.52
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.23 kW	3.76 kW
COP Tj = Tbiv	4.86	3.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.23 kW	3.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.86	3.43
WTOL	75 °C	75 °C
Poff	16 W	16 W



РТО	16 W	16 W
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2000 kWh	2252 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)

EN 14825		
	Low temperature	e Medium temperature
η_{s}	195 %	153 %
Prated	4.23 kW	3.76 kW
SCOP	5.07	4.02
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.73 kW	3.32 kW
COP Tj = -7°C	5.01	3.58





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Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.26 kW	2.02 kW
COP Tj = +2°C	5.38	4.22
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	1.45 kW	1.30 kW
$COPTj = +7^{\circ}C$	5.34	4.47
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.13 kW	1.08 kW
COP Tj = 12°C	5.32	4.49
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.23 kW	3.76 kW
COP Tj = Tbiv	4.86	3.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.23 kW	3.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.86	3.43
WTOL	75 °C	75 °C
Poff	16 W	16 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



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Annual energy consumption Qhe 1723 kWh 1934 kWh



Model: TTF 6.6 (cool) / TTC 6.6 (cool)

Configure model		
Model name	TTF 6.6 (cool) / TTC 6.6 (cool)	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

EN 14511-2

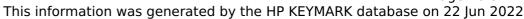
Heating

	Low temperature	Medium temperature
	2.37 kW	2.01 kW

Heat output	2.37 kW	2.01 kW
El input	0.52 kW	0.69 kW
СОР	4.60	2.91

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

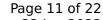
Warmer Climate





EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	198 %	158 %
Prated	6.70 kW	6.05 kW
SCOP	5.14	4.14
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.70 kW	6.05 kW
COP Tj = +2°C	4.52	3.34
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.29 kW	3.88 kW
COP Tj = +7°C	5.19	3.97
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.90 kW	1.72 kW
COP Tj = 12°C	5.71	4.81
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.70 kW	6.05 kW



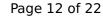


COP Tj = Tbiv	4.52	3.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.52	3.34
WTOL	75 °C	75 °C
Poff	16 W	16 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1741 kWh	1954 kWh

Colder Climate

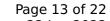
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825		
Low temperature	Medium temperature	
207 %	166 %	
6.70 kW	6.05 kW	
	Low temperature 207 %	





SCOP	5.38	4.34
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.04 kW	3.65 kW
COP Tj = -7°C	5.36	4.15
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.45 kW	2.22 kW
COP Tj = +2°C	5.64	4.68
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	1.57 kW	1.42 kW
$COP Tj = +7^{\circ}C$	5.76	4.80
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.13 kW	1.10 kW
COP Tj = 12°C	5.32	4.73
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.70 kW	6.05 kW
COP Tj = Tbiv	4.52	3.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.52	3.34
WTOL	75 °C	75 °C
Poff	16 W	16 W





This information was generated by the HP KEYMARK database on 22 Jun 2022 PTO 16 W 16 W **PSB** 16 W 16 W **PCK** 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.00 kW 0.00 kW 3069 kWh Annual energy consumption Qhe 3439 kWh

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	200 %	160 %
Prated	6.70 kW	6.05 kW
SCOP	5.20	4.18
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.91 kW	5.34 kW
COP Tj = -7°C	4.71	3.55





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Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.59 kW	3.25 kW
$COP Tj = +2^{\circ}C$	5.39	4.27
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	2.30 kW	2.09 kW
$COP Tj = +7^{\circ}C$	5.60	4.76
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.14 kW	1.08 kW
COP Tj = 12°C	5.47	4.61
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.70 kW	6.05 kW
COP Tj = Tbiv	4.52	3.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.70 kW	6.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.52	3.34
WTOL	75 °C	75 °C
Poff	16 W	16 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



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Annual energy consumption Qhe	2662 kWh	2988 kWh
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Model: TTF 8.6 (cool) / TTC 8.6 (cool)

Configure model		
Model name TTF 8.6 (cool) / TTC 8.6 (cool)		
Application	Heating (medium temp)	
Units Indoor		
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	2.78 kW	2.42 kW		
El input	0.60 kW	0.79 kW		
СОР	4.67	3.07		

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

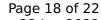
Warmer Climate





EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	40 dB(A)	40 dB(A)	

EN 14825		
Low temperature	Medium temperature	
197 %	157 %	
7.66 kW	6.93 kW	
5.13	4.13	
2 °C	2 °C	
2 °C	2 °C	
7.66 kW	6.93 kW	
4.29	3.22	
0.90	0.90	
4.91 kW	4.45 kW	
5.09	3.88	
0.90	0.90	
2.17 kW	1.97 kW	
5.75	4.85	
0.90	0.90	
7.66 kW	6.93 kW	
	Low temperature 197 % 7.66 kW 5.13 2 °C 2 °C 7.66 kW 4.29 0.90 4.91 kW 5.09 0.90 2.17 kW 5.75 0.90	





COP Tj = Tbiv 4.29 3.22 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 7.66 kW 6.93 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 4.29 3.22 WTOL 75 °C 75 °C Poff 16 W 16 W PTO 16 W 16 W PSB 16 W 16 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity			
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 75 °C	COP Tj = Tbiv	4.29	3.22
WTOL 75 °C 75 °C Poff 16 W 16 W PTO 16 W 16 W PSB 16 W 16 W PCK 0 W 0 W	Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.66 kW	6.93 kW
Poff 16 W 16 W PTO 16 W 16 W PSB 16 W 16 W PCK 0 W 0 W	COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.29	3.22
PTO 16 W 16 W PSB 16 W 0 W	WTOL	75 °C	75 °C
PSB 16 W 16 W PCK 0 W	Poff	16 W	16 W
PCK 0 W 0 W	РТО	16 W	16 W
	PSB	16 W	16 W
Supplementary Heater: Type of energy input Electricity Electricity	PCK	0 W	0 W
	Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP 0.00 kW 0.00 kW	Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe 1997 kWh 2243 kWh	Annual energy consumption Qhe	1997 kWh	2243 kWh

Colder Climate

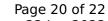
EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	40 dB(A)	40 dB(A)	

EN 14825		
Low temperature	Medium temperature	
204 %	163 %	
7.66 kW	6.93 kW	
	Low temperature 204 %	





SCOP	5.29	4.29
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.62 kW	4.18 kW
COP Tj = -7°C	5.17	4.07
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.81 kW	2.54 kW
COP Tj = +2°C	5.60	4.60
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.80 kW	1.63 kW
$COPTj = +7^{\circ}C$	5.76	4.90
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.13 kW	1.09 kW
COP Tj = 12°C	5.34	4.75
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.66 kW	6.93 kW
COP Tj = Tbiv	4.29	3.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.66 kW	6.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.29	3.22
WTOL	75 °C	75 °C
Poff	16 W	16 W



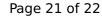


This information was generated by the HP KEYMARK database on 22 Jun 2022		
РТО	16 W	16 W
PSB	16 W	16 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3570 kWh	3985 kWh

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	40 dB(A)	40 dB(A)	

Low temperature	Medium temperature
197 %	158 %
7.66 kW	6.93 kW
5.12	4.14
-10 °C	-10 °C
-10 °C	-10 °C
6.76 kW	6.12 kW
4.53	3.44
	7.66 kW 5.12 -10 °C -10 °C 6.76 kW





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Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	4.11 kW	3.72 kW
COP Tj = +2°C	5.25	4.21
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.64 kW	2.39 kW
$COPTj = +7^{\circ}C$	5.59	4.69
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.16 kW	1.08 kW
COP Tj = 12°C	5.52	4.61
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.66 kW	6.93 kW
COP Tj = Tbiv	4.29	3.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.66 kW	6.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.29	3.22
WTOL	75 °C	75 °C
Poff	16 W	16 W
РТО	16 W	16 W
PSB	16 W	16 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



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Annual energy consumption Qhe	3094 kWh	3461 kWh