

Summary of	TTF 7 basic	Reg. No.	011-1W0045
Certificate Holder	-		-
Name	tecalor GmbH		
Address	Fürstenbergerstr. 77	Zip	37603
City	Holzminden	Country	Germany
Certification Body	DIN CERTCO Gesellschaft fü	ır Konformitätsbewe	ertung mbH
Name of testing laboratory	VDE Prüf- und Zertifizierung	sinstitut	
Subtype title	TTF 7 basic		
Heat Pump Type	Brine/Water		
Refrigerant	R410a		
Mass Of Refrigerant	2 kg		
Certification Date	28.10.2016		



# Model: TTF 7 basic, all climates

Gener	al Data
Power supply	3x400V 50Hz

# Heating

EN 1451	L1-2
	Low temperature
Heat output	7.64 kW
El input	1.70 kW
СОР	4.50
Indoor water flow rate	1.27 m³/h

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

# **Average Climate**



EN 12102-	1
	Low temperature
Sound power level indoor	55 dB(A)

EN 14825	
	Low temperature
n <sub>s</sub>	192 %
Prated	8.00 kW
СОР	5.01
-biv	-10 °C
ΓOL	-20 °C
Pdh Tj = -7°C	7.70 kW
COP Tj = -7°C	4.56
Cdh	0.90
dh Tj = +2°C	7.80 kW
OP Tj = +2°C	4.93
Cdh	0.90
dh Tj = +7°C	7.80 kW
COP Tj = +7°C	5.31
dh	0.90
dh Tj = 12°C	7.90 kW

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com





COP Tj = 12°C	5.74
Cdh	0.90
Pdh Tj = Tbiv	7.60 kW
COP Tj = Tbiv	4.49
Pdh Tj = TOL	7.60 kW
COP Tj = TOL	4.49
WTOL	60 °C
Poff	0 W
РТО	78 W
PSB	3 W
PCK	0 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	0.00 kW
Annual energy consumption Qhe	3153 kWh

### Warmer Climate

EN 14825	
	Low temperature
$\eta_s$	191 %
Prated	8.00 kW
SCOP	4.97





ins information was generated by the in-ite	
Tbiv	2 °C
TOL	2 °C
Pdh Tj = +2°C	7.60 kW
COP Tj = +2°C	4.49
Cdh	0.90
Pdh Tj = +7°C	7.70 kW
$COPTj = +7^{\circ}C$	4.85
Cdh	0.90
Pdh Tj = 12°C	7.90 kW
COP Tj = 12°C	5.45
Cdh	0.90
Pdh Tj = Tbiv	7.60 kW
COP Tj = Tbiv	4.49
Pdh Tj = TOL	7.60 kW
COP Tj = TOL	4.49
WTOL	60 °C
Poff	o w
РТО	78 W
PSB	3 W
PCK	o w
Supplementary Heater: Type of energy input	electricity





Supplementary Heater: PSUP	0.00 kW
Annual energy consumption Qhe	2052 kWh

EN 12102-	1
	Low temperature
Sound power level indoor	55 dB(A)

# Colder Climate

EN 14825	
	Low temperature
$\eta_{s}$	200 %
Prated	10.00 kW
SCOP	5.20
Tbiv	-15 °C
TOL	-22 °C
Pdh Tj = -7°C	7.80 kW
COP Tj = -7°C	5.13
Cdh	0.90
Pdh Tj = +2°C	7.90 kW
COP Tj = +2°C	5.42
Cdh	0.90

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com





This information was generated by the fir r	This in addabase on 17 Dec 2020
Pdh Tj = +7°C	7.90 kW
$COP Tj = +7^{\circ}C$	5.42
Cdh	0.90
Pdh Tj = 12°C	7.90 kW
COP Tj = 12°C	5.68
Cdh	0.90
Pdh Tj = Tbiv	7.80 kW
COP Tj = Tbiv	5.00
Pdh Tj = TOL	7.80 kW
COP Tj = TOL	5.00
WTOL	60 °C
Poff	0 W
РТО	78 W
PSB	3 W
PCK	0 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	1.89 kW
Annual energy consumption Qhe	4517 kWh
Pdh Tj = -15°C (if TOL<-20°C)	6.80
COP Tj = $-15$ °C (if TOL< $-20$ °C)	2.53
Cdh	0.90





EN 12102-1	
	Low temperature
Sound power level indoor	55 dB(A)



# Model: TTF 7 basic, average climates

General Data		
Power supply 3x400V 50Hz		

# Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	7.64 kW	6.76 kW	
El input	1.70 kW	2.67 kW	
СОР	4.50	2.53	
Indoor water flow rate	1.27 m³/h	0.91 m³/h	

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

# **Average Climate**



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	192 %	122 %
Prated	8.00 kW	7.00 kW
SCOP	5.01	3.25
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-10 °C
Pdh Tj = -7°C	7.70 kW	6.80 kW
COP Tj = -7°C	4.56	2.66
Cdh	0.90	0.90
Pdh Tj = +2°C	7.80 kW	7.10 kW
COP Tj = +2°C	4.93	3.19
Cdh	0.90	0.90
Pdh Tj = +7°C	7.80 kW	7.30 kW
COP Tj = +7°C	5.31	3.60
Cdh	0.90	0.90
Pdh Tj = 12°C	7.90 kW	7.50 kW

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



# $$\operatorname{Page}\ 11$$ of 11 This information was generated by the HP KEYMARK database on 17 Dec 2020

	<u> </u>	
COP Tj = 12°C	5.74	4.11
Cdh	0.90	0.90
Pdh Tj = Tbiv	7.60 kW	6.80 kW
COP Tj = Tbiv	4.49	2.53
Pdh Tj = TOL	7.60 kW	6.80 kW
COP Tj = TOL	4.49	2.53
WTOL	60 °C	60 °C
Poff	0 W	0 W
РТО	78 W	78 W
PSB	3 W	3 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	3153 kWh	4298 kWh