

This information was generated by the HP KEYMARK database on 17 Dec 2020

Summary of	OCHSNER SWK	Reg. No.	012-C700000
Certificate Holder			
Name	OCHSNER Energie Technik GmbH		
Address	Krackowizerstraße 4	Zip	4020
City	Linz	Country	Austria
Certification Body	RISE CERT		
Name of testing laboratory	RISE		
Subtype title	OCHSNER SWK		
Heat Pump Type	Brine/Water and Water/Water		
Refrigerant	R410a		
Mass Of Refrigerant	0.95 kg		
Certification Date	11.12.2019		
Testing basis	EN14511:2018;EN14825:2016;EN12102:2017		

Model: OCHSNER SWK007P8d

General Data

Power supply	3x400V 50Hz
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Brine/Water Heat Pump

Heating

EN 14511-4

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

EN 14511-2

	Low temperature	Medium temperature
El input	0.96 kW	1.74 kW
COP	4.65	2.90
Indoor water flow rate	0.77 m ³ /h	0.55 m ³ /h

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)

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EN 14825

	Low temperature	Medium temperature
η_s	214 %	150 %
Prated	7.11 kW	6.39 kW
SCOP	5.56	3.96
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.29 kW	5.65 kW
COP Tj = -7°C	4.85	3.09
Cdh	0.99	0.99
Pdh Tj = +2°C	3.83 kW	3.44 kW
COP Tj = +2°C	5.70	4.03
Cdh	0.98	0.99
Pdh Tj = +7°C	2.46 kW	2.21 kW
COP Tj = +7°C	6.15	4.55
Cdh	0.96	0.97
Pdh Tj = 12°C	2.16 kW	2.07 kW
COP Tj = 12°C	6.01	4.54
Cdh	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81

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Pdh Tj = TOL	7.11 kW	6.39 kW
COP Tj = TOL	4.43	2.81
WTOL	65 °C	65 °C
Poff	12 W	10 W
PTO	15 W	13 W
PSB	15 W	13 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	2597 kWh	3291 kWh

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_s	223 %	157 %
Prated	7.11 kW	6.39 kW
SCOP	5.77	4.12
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.30 kW	3.87 kW
COP Tj = -7°C	5.67	3.84

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Cdh	0.98	0.99
Pdh Tj = +2°C	2.62 kW	2.35 kW
COP Tj = +2°C	6.21	4.51
Cdh	0.97	0.98
Pdh Tj = +7°C	2.17 kW	2.07 kW
COP Tj = +7°C	6.09	4.65
Cdh	0.96	0.97
Pdh Tj = 12°C	2.15 kW	2.09 kW
COP Tj = 12°C	5.84	4.54
Cdh	0.96	0.97
Pdh Tj = Tbiv	7.11 kW	6.39 kW
COP Tj = Tbiv	4.43	2.81
Pdh Tj = TOL	7.11 kW	6.39 kW
COP Tj = TOL	4.43	2.81
WTOL	65 °C	65 °C
Poff	12 W	10 W
PTO	15 W	13 W
PSB	15 W	13 W
PCK	0 W	0 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 Q _{he}	3008 kWh	3802 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	5.80	5.21
COP T _j = -15°C (if TOL<-20°C)	5.05	3.33
C _{dh}	0.99	0.99

Water/Water Heat Pump

Heating

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

EN 14511-2		
	Low temperature	Medium temperature
El input	1.58 kW	2.35 kW
COP	5.96	3.63
Indoor water flow rate	1.65 m ³ /h	0.94 m ³ /h

Average Climate

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EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	305 %	211 %
Prated	9.43 kW	8.51 kW
SCOP	7.82	5.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.34 kW	7.53 kW
COP Tj = -7°C	6.48	4.03
Cdh	1.00	1.00
Pdh Tj = +2°C	5.08 kW	4.58 kW
COP Tj = +2°C	7.93	5.47
Cdh	0.99	1.00
Pdh Tj = +7°C	3.26 kW	2.95 kW
COP Tj = +7°C	8.76	6.55
Cdh	0.99	0.99
Pdh Tj = 12°C	2.91 kW	2.78 kW

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COP Tj = 12°C	8.65	6.84
Cdh	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL	9.43 kW	8.51 kW
COP Tj = TOL	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
PTO	4 W	4 W
PSB	4 W	4 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	2463 kWh	3186 kWh

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_s	317 %	219 %
Prated	9.43 kW	8.51 kW
SCOP	8.12	5.68

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Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.71 kW	5.15 kW
COP Tj = -7°C	7.77	5.12
Cdh	1.00	1.00
Pdh Tj = +2°C	3.47 kW	3.14 kW
COP Tj = +2°C	8.76	6.31
Cdh	0.99	0.99
Pdh Tj = +7°C	2.91 kW	2.78 kW
COP Tj = +7°C	8.76	6.85
Cdh	0.99	0.99
Pdh Tj = 12°C	2.89 kW	2.79 kW
COP Tj = 12°C	8.39	7.06
Cdh	0.99	0.99
Pdh Tj = Tbiv	9.43 kW	8.51 kW
COP Tj = Tbiv	5.96	3.63
Pdh Tj = TOL	9.43 kW	8.51 kW
COP Tj = TOL	5.96	3.63
WTOL	65 °C	65 °C
Poff	8 W	8 W
PTO	4 W	4 W

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PSB	4 W	4 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 Q _{he}	2847 kWh	3676 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	7.69	6.94
COP T _j = -15°C (if TOL<-20°C)	6.87	4.37
C _{dh}	1.00	1.00