

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

Summary of	AQUATOP S08	Reg. No.	011-1W0305
Certificate Holder			
Name	ELCO GmbH		
Address	Hohenzollernstrasse 31	Zip	72379
City	Hechingen	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Name of testing laboratory	Wärmepumpen-Testzentrum WPZ		
Subtype title	AQUATOP S08		
Heat Pump Type	Brine/Water and Water/Water		
Refrigerant	R410a		
Mass Of Refrigerant	2.3 kg		
Certification Date	04.05.2019		

Model: AQUATOP S08

General Data

Power supply	3x230V 50Hz
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Brine/Water Heat Pump

Heating

EN 14511-4

Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

EN 14511-2

	Medium temperature	Low temperature
Heat output	7.74 kW	6.71 kW
El input	1.44 kW	2.53 kW
COP	4.65	2.65
Indoor water flow rate	1.38 m ³ /h	0.78 m ³ /h

Average Climate

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EN 12102-1

	Medium temperature	Low temperature
Sound power level indoor	34 dB(A)	34 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	189 %	154 %
Prated	8.00 kW	7.00 kW
SCOP	4.92	4.06
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.33 kW	7.58 kW
COP Tj = -7°C	4.59	3.01
Pdh Tj = +2°C	8.66 kW	8.24 kW
COP Tj = +2°C	5.12	4.07
Pdh Tj = +7°C	8.66 kW	8.75 kW
COP Tj = +7°C	5.12	4.81
Pdh Tj = 12°C	8.25 kW	9.20 kW
COP Tj = 12°C	5.12	5.67
Pdh Tj = Tbiv	8.25 kW	7.36 kW
COP Tj = Tbiv	4.46	2.77

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Pdh Tj = TOL	8.25 kW	7.36 kW
COP Tj = TOL	4.46	2.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Elektrizit�t	Elektrizit�t
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	3461 kWh	3749 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	34 dB(A)	34 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	187 %	155 %
Prated	8.00 kW	7.00 kW

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SCOP	4.89	4.08
Tbiv	2 °C	2 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	8.25 kW	7.36 kW
COP Tj = +2°C	4.46	2.77
Pdh Tj = +7°C	8.58 kW	8.02 kW
COP Tj = +7°C	4.99	3.60
Pdh Tj = 12°C	8.66 kW	8.90 kW
COP Tj = 12°C	5.12	5.09
Pdh Tj = Tbiv	8.25 kW	7.36 kW
COP Tj = Tbiv	4.46	2.77
Pdh Tj = TOL	8.25 kW	7.36 kW
COP Tj = TOL	4.46	2.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Elektrizit�t	Elektrizit�t
Supplementary Heater: PSUP	6.00 kW	6.00 kW

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Annual energy consumption Q_{he}	2255 kWh	2408 kWh
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Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	34 dB(A)	34 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	191 %	160 %
Prated	8.00 kW	7.00 kW
SCOP	4.98	4.20
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.66 kW	8.09 kW
COP Tj = -7°C	5.12	3.82
Pdh Tj = +2°C	8.68 kW	8.68 kW
COP Tj = +2°C	5.12	4.68
Pdh Tj = +7°C	8.68 kW	9.05 kW
COP Tj = +7°C	5.12	5.37
Pdh Tj = 12°C	8.68 kW	9.20 kW

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COP Tj = 12°C	5.12	5.67
Pdh Tj = Tbiv	8.25 kW	7.36 kW
COP Tj = Tbiv	4.46	2.77
Pdh Tj = TOL	8.25 kW	7.36 kW
COP Tj = TOL	4.46	2.77
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Elektrizit�t	Elektrizit�t
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	4086 kWh	4323 kWh

Water/Water Heat Pump

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

EN 14511-2		
	Low temperature	Medium temperature
Heat output	9.84 kW	8.95 kW
El input	1.73 kW	2.60 kW
COP	5.69	3.44
Indoor water flow rate	1.76 m ³ /h	1.01 m ³ /h

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	34 dB(A)	34 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	243 %	193 %

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Prated	10.00 kW	9.00 kW
SCOP	6.28	5.04
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	9.94 kW	9.22 kW
COP Tj = -7°C	5.86	3.74
Pdh Tj = +2°C	10.33 kW	10.02 kW
COP Tj = +2°C	6.53	5.05
Pdh Tj = +7°C	10.33 kW	10.64 kW
COP Tj = +7°C	6.53	5.97
Pdh Tj = 12°C	10.33 kW	11.19 kW
COP Tj = 12°C	6.53	7.04
Pdh Tj = Tbiv	9.84 kW	8.95 kW
COP Tj = Tbiv	5.69	3.44
Pdh Tj = TOL	9.84 kW	8.95 kW
COP Tj = TOL	5.69	3.44
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	20 W	20 W
PSB	20 W	20 W

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PCK	0 W	0 W
Supplementary Heater: Type of energy input	Elektrizit��t	Elektrizit��t
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Q _{he}	3238 kWh	3671 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	34 dB(A)	34 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	241 %	195 %
Prated	10.00 kW	9.00 kW
SCOP	6.23	5.07
T _{biv}	2 °C	2 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = +2°C	9.84 kW	8.95 kW
COP T _j = +2°C	5.69	3.44
P _{dh} T _j = +7°C	10.23 kW	9.75 kW
COP T _j = +7°C	6.37	4.47

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Pdh Tj = 12°C	10.33 kW	10.82 kW
COP Tj = 12°C	6.53	6.32
Pdh Tj = Tbiv	9.84 kW	8.95 kW
COP Tj = Tbiv	5.69	3.44
Pdh Tj = TOL	9.84 kW	8.95 kW
COP Tj = TOL	5.69	3.44
Cdh	1.00	1.00
WTOL	65 °C	65 °C
Poff	0 W	0 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Elektrizit��t	Elektrizit��t
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	2112 kWh	2360 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	34 dB(A)	34 dB(A)

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EN 14825

	Low temperature	Medium temperature
η_s	246 %	200 %
Prated	10.00 kW	9.00 kW
SCOP	6.34	5.21
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	10.33 kW	9.84 kW
COP Tj = -7°C	3.44	4.74
Pdh Tj = +2°C	10.33 kW	10.56 kW
COP Tj = +2°C	6.53	5.81
Pdh Tj = +7°C	10.33 kW	11.01 kW
COP Tj = +7°C	6.53	6.67
Pdh Tj = 12°C	10.33 kW	11.19 kW
COP Tj = 12°C	6.53	7.04
Pdh Tj = Tbiv	9.84 kW	8.95 kW
COP Tj = Tbiv	5.69	3.44
Pdh Tj = TOL	9.84 kW	8.95 kW
COP Tj = TOL	5.69	3.44
Cdh	1.00	1.00
WTOL	65 °C	65 °C

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

Poff	0 W	0 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Elektrizit�t	Elektrizit�t
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	3826 kWh	4235 kWh