

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

Summary of	AQUATOP S06	Reg. No.	011-1W0304
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 S06		
Heat Pump Type	Brine/Water and Water/Water		
Refrigerant	R410a		
Mass Of Refrigerant	1.9 kg		
Certification Date	04.05.2019		

## Model: AQUATOP S06

### 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	5.59 kW	4.85 kW
El input	1.22 kW	1.86 kW
COP	4.58	2.61
Indoor water flow rate	1.06 m <sup>3</sup> /h	0.60 m <sup>3</sup> /h

### Average Climate

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### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	189 %	137 %
Prated	6.00 kW	5.00 kW
SCOP	4.93	3.64
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.84 kW	5.35 kW
COP Tj = -7°C	4.47	2.79
Pdh Tj = +2°C	5.96 kW	5.61 kW
COP Tj = +2°C	5.00	3.65
Pdh Tj = +7°C	6.02 kW	5.77 kW
COP Tj = +7°C	5.39	4.27
Pdh Tj = 12°C	6.13 kW	5.98 kW
COP Tj = 12°C	5.79	5.02
Pdh Tj = Tbiv	5.79 kW	5.25 kW
COP Tj = Tbiv	4.39	2.59

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Pdh Tj = TOL	5.79 kW	5.25 kW
COP Tj = TOL	4.39	2.59
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	Elektrizität	Elektrizität
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	2426 kWh	2983 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	39 dB(A)	39 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	191 %	137 %
Prated	6.00 kW	5.00 kW

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SCOP	4.97	3.63
Tbiv	2 °C	2 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	5.79 kW	5.25 kW
COP Tj = +2°C	4.39	2.57
Pdh Tj = +7°C	5.90 kW	5.51 kW
COP Tj = +7°C	5.53	3.26
Pdh Tj = 12°C	6.07 kW	5.88 kW
COP Tj = 12°C	5.53	4.48
Pdh Tj = Tbiv	5.79 kW	5.25 kW
COP Tj = Tbiv	4.39	2.59
Pdh Tj = TOL	5.79 kW	5.25 kW
COP Tj = TOL	4.39	2.59
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	Elektrizität	Elektrizität
Supplementary Heater: PSUP	6.00 kW	6.00 kW

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Annual energy consumption $Q_{he}$	1556 kWh	1931 kWh
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## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	39 dB(A)	39 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	195 %	142 %
Prated	6.00 kW	5.00 kW
SCOP	5.08	3.75
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.40 kW	5.56 kW
COP Tj = -7°C	5.00	3.44
Pdh Tj = +2°C	5.46 kW	5.77 kW
COP Tj = +2°C	5.39	4.16
Pdh Tj = +7°C	5.51 kW	5.93 kW
COP Tj = +7°C	5.66	4.76
Pdh Tj = 12°C	5.56 kW	6.03 kW

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COP Tj = 12°C	5.79	5.25
Pdh Tj = Tbiv	5.79 kW	5.25 kW
COP Tj = Tbiv	4.39	2.59
Pdh Tj = TOL	5.79 kW	5.25 kW
COP Tj = TOL	4.39	2.59
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	Elektrizität	Elektrizität
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	2812 kWh	3453 kWh

Water/Water Heat Pump

## Heating

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<b>EN 14511-4</b>	
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

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	6.67 kW	6.07 kW
El input	1.19 kW	1.79 kW
COP	5.61	3.39
Indoor water flow rate	1.66 m <sup>3</sup> /h	1.34 m <sup>3</sup> /h

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	39 dB(A)	39 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	243 %	182 %



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Prated	7.00 kW	6.00 kW
SCOP	6.28	6.00
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.73 kW	6.19 kW
COP Tj = -7°C	5.71	3.65
Pdh Tj = +2°C	6.87 kW	6.49 kW
COP Tj = +2°C	6.39	4.78
Pdh Tj = +7°C	6.93 kW	6.67 kW
COP Tj = +7°C	6.89	5.59
Pdh Tj = 12°C	7.06 kW	6.91 kW
COP Tj = 12°C	7.40	6.57
Pdh Tj = Tbiv	6.67 kW	6.07 kW
COP Tj = Tbiv	5.61	3.39
Pdh Tj = TOL	6.67 kW	6.10 kW
COP Tj = TOL	5.61	3.39
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	Elektrizität	Elektrizität
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Q <sub>he</sub>	2193 kWh	2645 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	39 dB(A)	39 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	245 %	182 %
Prated	7.00 kW	6.00 kW
SCOP	6.32	4.74
T <sub>biv</sub>	2 °C	2 °C
TOL	-22 °C	-22 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	6.67 kW	6.07 kW
COP T <sub>j</sub> = +2°C	5.61	3.39
P <sub>dh</sub> T <sub>j</sub> = +7°C	6.80 kW	6.37 kW
COP T <sub>j</sub> = +7°C	6.22	4.27

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Pdh Tj = 12°C	6.99 kW	6.80 kW
COP Tj = 12°C	7.07	5.86
Pdh Tj = Tbiv	6.67 kW	6.07 kW
COP Tj = Tbiv	5.61	3.39
Pdh Tj = TOL	6.67 kW	6.07 kW
COP Tj = TOL	5.61	3.39
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	Elektrizität	Elektrizität
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	1409 kWh	1711 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	39 dB(A)	39 dB(A)

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**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	250 %	188 %
Prated	7.00 kW	6.00 kW
SCOP	6.46	4.89
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.22 kW	6.43 kW
COP Tj = -7°C	6.39	4.50
Pdh Tj = +2°C	4.29 kW	6.67 kW
COP Tj = +2°C	6.89	5.44
Pdh Tj = +7°C	6.35 kW	6.86 kW
COP Tj = +7°C	7.23	6.23
Pdh Tj = 12°C	6.41 kW	6.97 kW
COP Tj = 12°C	7.40	6.87
Pdh Tj = Tbiv	6.67 kW	6.07 kW
COP Tj = Tbiv	5.61	3.39
Pdh Tj = TOL	6.67 kW	6.07 kW
COP Tj = TOL	5.61	3.39
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	Elektrizität	Elektrizität
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	2544 kWh	3059 kWh