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#### This information was generated by the HP KEYMARK database on 21 Jun 2022

#### Login

Summary of	AQUATOP S08	Reg. No.	011-1W0305	
Certificate Holder	Certificate Holder			
Name	ELCO GmbH			
Address	Hohenzollernstrasse 31	Zip	72379	
City	Hechingen	Country	Germany	
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH			
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 508**

Configure model		
Model name AQUATOP S08		
Application	Heating (medium temp)	
Units Indoor		
Climate Zone Colder Climate + Warmer Climate		
Reversibility No		
Cooling mode application (optional) n/a		

General Data		
Power supply	3x230V 50Hz	

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				
Low temperature Medium temperature				
Heat output	7.74 kW	6.71 kW		
El input	1.44 kW	2.53 kW		
СОР	4.65	2.65		

### 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	
$\eta_{s}$	187 %	155 %	
Prated	8.00 kW	7.00 kW	
SCOP	4.89	4.08	
Tbiv	2 °C	2 °C	
TOL	-22 °C	-22 °C	
Pdh Tj = $+2^{\circ}$ C	8.25 kW	7.36 kW	
$COPTj = +2^{\circ}C$	4.46	2.77	
Pdh Tj = $+7^{\circ}$ C	8.58 kW	8.02 kW	
$COPTj = +7^{\circ}C$	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 or Pdh Tj = Tdesignh if TOL < Tdesignh	8.25 kW	7.36 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.46	2.77	





1.00	1.00
65 °C	65 °C
0 W	0 W
20 W	20 W
20 W	20 W
o w	0 W
Electricity	Electricity
6.00 kW	6.00 kW
2255 kWh	2408 kWh
	65 °C  0 W  20 W  20 W  0 W  Electricity  6.00 kW

### 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	
191 %	160 %	
8.00 kW	7.00 kW	
4.98	4.20	
-22 °C	-22 °C	
	Low temperature  191 %  8.00 kW  4.98	





		The database on 21 Juli 202.
TOL	-22 °C	-22 °C
Pdh Tj = $-7^{\circ}$ 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 = $+7^{\circ}$ C	8.68 kW	9.05 kW
$COP Tj = +7^{\circ}C$	5.12	5.37
Pdh Tj = 12°C	8.68 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
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.25 kW	7.36 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.46	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	0 W	o w
РТО	20 W	20 W
PSB	20 W	20 W
РСК	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW



Annual energy consumption Qhe	4086 kWh	4323 kWh
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# 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
$\eta_{s}$	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 = $+7^{\circ}$ 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
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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 or Pdh Tj = Tdesignh if TOL < Tdesignh	8.25 kW	7.36 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.46	2.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	0 W	0 W
РТО	20 W	20 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	3461 kWh	3749 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	
СОР	5.69	3.44	

### Warmer Climate

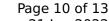
EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	34 dB(A)	34 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	241 %	195 %
Prated	10.00 kW	9.00 kW





This information was gener	ated by the HE KLIMA	NK database on 21 jun 202.
SCOP	6.23	5.07
Tbiv	2 °C	2 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	9.84 kW	8.95 kW
COP Tj = +2°C	5.69	3.44
Pdh Tj = +7°C	10.23 kW	9.75 kW
$COP Tj = +7^{\circ}C$	6.37	4.47
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 or Pdh Tj = Tdesignh if TOL < Tdesignh	9.84 kW	8.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.69	3.44
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	0 W	0 W
РТО	20 W	20 W
PSB	20 W	20 W
РСК	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW





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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
$\eta_{s}$	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

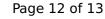


COP Tj = 12°C	6.53	7.04
Pdh Tj = Tbiv	9.84 kW	8.95 kW
COP Tj = Tbiv	5.69	3.44
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.84 kW	8.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.69	3.44
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	0 W	0 W
РТО	20 W	20 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	3826 kWh	4235 kWh

## 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
$\eta_s$	243 %	193 %
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
$COP Tj = +7^{\circ}C$	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 or Pdh Tj = Tdesignh if TOL < Tdesignh	9.84 kW	8.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.69	3.44
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	1.00	1.00
WTOL	65 °C	65 °C
Poff	0 W	0 W



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РТО	20 W	20 W
PSB	20 W	20 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	3238 kWh	3671 kWh