Login

Summary of	AQUATOP S17	Reg. No.	011-1W0308
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 S17		
Heat Pump Type	Brine/Water and Water/Water		
Refrigerant	R410A		
Mass of Refrigerant	3.8 kg		
Certification Date	04.05.2019		

Model: AQUATOP S17

Configure model	
Model name	AQUATOP S17
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	16.83 kW	14.78 kW
El input	3.44 kW	5.34 kW
COP	4.89	2.77

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	200 %	159 %
Prated	17.00 kW	15.00 kW
SCOP	5.19	4.19
Tbiv	2 °C	2 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	16.92 kW	15.27 kW
COP Tj = +2°C	4.67	2.80
Pdh Tj = +7°C	17.59 kW	16.64 kW
COP Tj = +7°C	5.23	3.64
Pdh Tj = 12°C	17.76 kW	18.47 kW
COP Tj = 12°C	5.37	5.15
Pdh Tj = Tbiv	16.92 kW	15.27 kW
COP Tj = Tbiv	4.67	2.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.92 kW	15.27 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.67	2.80

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	4354 kWh	4872 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	203 %	160 %
Prated	17.00 kW	15.00 kW
SCOP	5.28	4.19
Tbiv	-22 °C	-22 °C

TOL	-22 °C	-22 °C
Pdh Tj = -7°C	17.76 kW	16.79 kW
COP Tj = -7°C	5.37	3.86
Pdh Tj = +2°C	17.76 kW	18.01 kW
COP Tj = +2°C	5.37	4.73
Pdh Tj = +7°C	17.76 kW	18.78 kW
COP Tj = +7°C	5.37	5.43
Pdh Tj = 12°C	17.76 kW	19.08 kW
COP Tj = 12°C	5.37	5.74
Pdh Tj = Tbiv	16.92 kW	15.27 kW
COP Tj = Tbiv	4.67	2.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.92 kW	15.27 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.67	2.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW

Annual energy consumption Qhe	7901 kWh	8986 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	201 %	158 %
Prated	17.00 kW	15.00 kW
SCOP	5.22	4.15
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	17.08 kW	15.72 kW
COP Tj = -7°C	5.37	3.05
Pdh Tj = +2°C	17.76 kW	17.10 kW
COP Tj = +2°C	5.37	4.11
Pdh Tj = +7°C	17.76 kW	18.17 kW
COP Tj = +7°C	5.37	4.87
Pdh Tj = 12°C	17.76 kW	19.10 kW

COP Tj = 12°C	5.37	5.74
Pdh Tj = Tbiv	16.92 kW	15.27 kW
COP Tj = Tbiv	4.67	2.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.92 kW	15.27 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.67	2.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	6700 kWh	7605 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	21.27 kW	19.35 kW
El input	3.53 kW	5.31 kW
COP	6.03	3.64

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	260 %	210 %
Prated	21.00 kW	19.00 kW

SCOP	6.70	5.44
Tbiv	2 °C	2 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	21.27 kW	19.35 kW
COP Tj = +2°C	6.03	3.64
Pdh Tj = +7°C	22.11 kW	21.09 kW
COP Tj = +7°C	6.75	4.73
Pdh Tj = 12°C	22.33 kW	23.41 kW
COP Tj = 12°C	6.93	6.70
Pdh Tj = Tbiv	21.27 kW	19.35 kW
COP Tj = Tbiv	6.03	3.64
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	21.27 kW	19.35 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.03	3.64
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW

Annual energy consumption Qhe	4242 kWh	4754 kWh

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	264 %	215 %
Prated	21.00 kW	19.00 kW
SCOP	6.81	5.58
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	22.33 kW	21.28 kW
COP Tj = -7°C	6.93	5.02
Pdh Tj = +2°C	22.33 kW	22.82 kW
COP Tj = +2°C	6.93	6.15
Pdh Tj = +7°C	22.33 kW	23.80 kW
COP Tj = +7°C	6.93	7.06
Pdh Tj = 12°C	22.33 kW	24.18 kW

COP Tj = 12°C	6.93	7.46
Pdh Tj = Tbiv	21.27 kW	19.35 kW
COP Tj = Tbiv	6.03	3.64
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	21.27 kW	19.35 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.03	3.64
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	7701 kWh	8552 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**
η_s	261 %	207 %
Prated	21.00 kW	19.00 kW
SCOP	6.73	5.39
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	21.47 kW	19.92 kW
COP Tj = -7°C	6.21	3.97
Pdh Tj = +2°C	22.33 kW	21.67 kW
COP Tj = +2°C	6.93	5.34
Pdh Tj = +7°C	22.33 kW	23.02 kW
COP Tj = +7°C	6.93	6.93
Pdh Tj = 12°C	22.33 kW	24.18 kW
COP Tj = 12°C	6.93	7.46
Pdh Tj = Tbiv	21.47 kW	19.35 kW
COP Tj = Tbiv	6.21	3.64
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	21.47 kW	19.35 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	6.21	3.64
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	6526 kWh	7422 kWh