Subtype AQUATOP S06

Certificate Holder	ELCO GmbH
Address	Hohenzollernstrasse 31
ZIP	72379
City	Hechingen
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	AQUATOP S06
Registration number	011-1W0304
Heat Pump Type	Brine/Water and Water/Water
Refrigerant	R410A
Mass of Refrigerant	1.9 kg
Certification Date	04.05.2019

Model AQUATOP S06	
Model name	AQUATOP S06
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x230V 50Hz
Off-peak product	n/a

Brine/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	5.59 kW	4.85 kW
El input	1.22 kW	1.86 kW
COP	4.58	2.61

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	189 %	137 %
Prated	5.79 kW	5.25 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
Cdh Tj = -7 °C		
Pdh Tj = +2°C	5.96 kW	5.61 kW
COP Tj = +2°C	5.00	3.65
Cdh Tj = +2 °C		
Pdh Tj = +7°C	6.02 kW	5.77 kW
COP Tj = +7°C	5.39	4.27
Cdh Tj = +7 °C		
Pdh Tj = 12°C	6.13 kW	5.98 kW

COP Tj = 12°C	5.79	5.02
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	5.79 kW	5.25 kW
COP Tj = Tbiv	4.39	2.59
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.79 kW	5.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.39	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	2426 kWh	2983 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	195 %	142 %
Prated	5.79 kW	5.25 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
Cdh Tj = -7 °C		
Pdh Tj = +2°C	5.46 kW	5.77 kW
COP Tj = +2°C	5.39	4.16
Cdh Tj = +2 °C		
Pdh Tj = +7°C	5.51 kW	5.93 kW
COP Tj = +7°C	5.66	4.76
Cdh Tj = +7 °C		
Pdh Tj = 12°C	5.56 kW	6.03 kW
COP Tj = 12°C	5.79	5.25
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	5.79 kW	5.25 kW
COP Tj = Tbiv	4.39	2.59
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.79 kW	5.25 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.39	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	2812 kWh	3453 kWh

EN 12102-1 | Warmer Climate

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

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	191 %	137 %
Prated	5.79 kW	5.25 kW
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
Cdh Tj = +2 °C		
Pdh Tj = +7°C	5.90 kW	5.51 kW
COP Tj = +7°C	5.53	3.26
Cdh Tj = +7 °C		
Pdh Tj = 12°C	6.07 kW	5.88 kW
COP Tj = 12°C	5.53	4.48
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	5.79 kW	5.25 kW
COP Tj = Tbiv	4.39	2.59
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.79 kW	5.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.39	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	1556 kWh	1931 kWh

Water/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	6.67 kW	6.07 kW
El input	1.19 kW	1.79 kW
COP	5.61	3.39

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	243 %	182 %
Prated	6.67 kW	6.07 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
Cdh Tj = -7 °C		
Pdh Tj = +2°C	6.87 kW	6.49 kW
COP Tj = +2°C	6.39	4.78
Cdh Tj = +2 °C		
Pdh Tj = +7°C	6.93 kW	6.67 kW
COP Tj = +7°C	6.89	5.59
Cdh Tj = +7 °C		
Pdh Tj = 12°C	7.06 kW	6.91 kW
COP Tj = 12°C	7.40	6.57
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.67 kW	6.07 kW
COP Tj = Tbiv	5.61	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.67 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.61	3.39

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	2193 kWh	2645 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	250 %	188 %
Prated	6.67 kW	6.07 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
Cdh Tj = -7 °C		
Pdh Tj = +2°C	4.29 kW	6.67 kW
COP Tj = +2°C	6.89	5.44
Cdh Tj = +2 °C		
Pdh Tj = +7°C	6.35 kW	6.86 kW
COP Tj = +7°C	7.23	6.23
Cdh Tj = +7 °C		
Pdh Tj = 12°C	6.41 kW	6.97 kW
COP Tj = 12°C	7.40	6.87
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.67 kW	6.07 kW
COP Tj = Tbiv	5.61	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.67 kW	6.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.61	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	2544 kWh	3059 kWh

EN 12102-1 | Warmer Climate

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

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	245 %	182 %
Prated	6.67 kW	6.07 kW
SCOP	6.32	4.74
Tbiv	2 °C	2 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	6.67 kW	6.07 kW
COP Tj = +2°C	5.61	3.39
Cdh Tj = +2 °C		
Pdh Tj = +7°C	6.80 kW	6.37 kW
COP Tj = +7°C	6.22	4.27
Cdh Tj = +7 °C		
Pdh Tj = 12°C	6.99 kW	6.80 kW
COP Tj = 12°C	7.07	5.86
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.67 kW	6.07 kW
COP Tj = Tbiv	5.61	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.67 kW	6.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.61	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	1409 kWh	1711 kWh