Login

Summary of	AEROTOP SG10 INOX / INOX OPTIC	Reg. No.	011-1W0472
Certificate Holder			
Name	ELCO GmbH		
Address	Hohenzollernstrasse 31	Zip	72379
City	Hechingen	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	AEROTOP SG10 INOX / INOX OPTIC		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	4.27 kg		
Certification Date	05.07.2021		
Testing basis	HP KEYMARK certification scheme rules rev. 8		

Model: AEROTOP SG10 INOX / INOX OPTIC

Configure model	
Model name	AEROTOP SG10 INOX / INOX OPTIC
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.10 kW	4.85 kW
El input	0.95 kW	1.50 kW
COP	5.35	3.24

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	193 %	141 %
Prated	9.21 kW	9.20 kW
SCOP	4.91	3.59
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.15 kW	8.03 kW
COP Tj = -7°C	3.46	2.39
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	5.08 kW	4.95 kW
COP Tj = +2°C	5.12	3.60
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	3.72 kW	3.65 kW
COP Tj = +7°C	6.21	4.82
Cdh Tj = +7 °C	0.960	0.960
Pdh Tj = 12°C	4.34 kW	4.28 kW

COP Tj = 12°C	8.25	6.64
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	8.15 kW	8.03 kW
COP Tj = Tbiv	3.46	2.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.10 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.98	2.20
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.960	0.960
WTOL	60 °C	60 °C
Poff	24 W	24 W
PTO	24 W	25 W
PSB	24 W	24 W
PCK	24 W	24 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.11 kW	0.20 kW
Annual energy consumption Qhe	3879 kWh	5299 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825

	Low temperature	**Medium temperature**
η_s	201 %	159 %
Prated	5.35 kW	4.98 kW
SCOP	5.11	4.03
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.35 kW	4.98 kW
COP Tj = +2°C	4.29	2.60
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.81 kW	3.77 kW
COP Tj = +7°C	5.65	4.52
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	4.45 kW	4.25 kW
COP Tj = 12°C	7.47	5.65
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	5.35 kW	4.98 kW
COP Tj = Tbiv	4.29	2.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.35 kW	4.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.29	2.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990

WTOL	60 °C	60 °C
Poff	24 W	24 W
PTO	24 W	25 W
PSB	24 W	24 W
PCK	24 W	24 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1400 kWh	1649 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	154 %	125 %
Prated	12.71 kW	12.83 kW
SCOP	3.92	3.20
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C

Pdh Tj = -7°C	8.12 kW	8.20 kW
COP Tj = -7°C	3.63	2.91
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.85 kW	4.93 kW
COP Tj = +2°C	5.67	4.30
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	3.95 kW	3.80 kW
COP Tj = +7°C	7.10	5.47
Cdh Tj = +7 °C	0.960	0.960
Pdh Tj = 12°C	4.47 kW	4.25 kW
COP Tj = 12°C	8.25	7.10
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	8.12 kW	8.20 kW
COP Tj = Tbiv	3.63	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.41 kW	6.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.00	1.55
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.960	0.960
WTOL	60 °C	60 °C
Poff	24 W	24 W
PTO	24 W	25 W
PSB	24 W	24 W

PCK	24 W	24 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.30 kW	6.83 kW
Annual energy consumption Qhe	8434 kWh	10423 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL<-20°C)		
Cdh Tj = -15 °C		