

Subtype AEROTOP SG10 INOX / INOX OPTIC

Certificate Holder	ELCO GmbH
Address	Hohenzollernstrasse 31
ZIP	72379
City	Hechingen
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	AEROTOP SG10 INOX / INOX OPTIC
Registration number	011-1W0472
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

Model name	AEROTOP SG10 INOX / INOX OPTIC
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	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

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	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

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	154 %	125 %
Prated	13.42 kW	13.55 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	13.42 kW	13.55 kW
Annual energy consumption Qhe	8434 kWh	10423 kWh
Pdh Tj = -15°C (if TOL		
COP Tj = -15°C (if TOL		
Cdh Tj = -15 °C		

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	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