

Subtype AEROTOP SG14 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 SG14 INOX / INOX OPTIC
Registration number	011-1W0476
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 SG14 INOX / INOX OPTIC

Model name	AEROTOP SG14 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	183 %	151 %
Prated	15.70 kW	15.15 kW
SCOP	4.64	3.85
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	13.89 kW	13.40 kW
COP Tj = -7°C	2.93	2.38
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	8.84 kW	8.51 kW
COP Tj = +2°C	4.69	3.80
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	5.58 kW	5.53 kW
COP Tj = +7°C	6.27	5.42
Cdh Tj = +7 °C	0.960	0.960
Pdh Tj = 12°C	4.43 kW	4.40 kW
COP Tj = 12°C	7.70	6.57
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	13.89 kW	13.40 kW
COP Tj = Tbiv	2.93	2.38

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.79 kW	12.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	2.08
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	24 W
PSB	24 W	24 W
PCK	24 W	24 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.91 kW	2.64 kW
Annual energy consumption Qhe	6993 kWh	8129 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	150 %	127 %
Prated	23.13 kW	22.63 kW
SCOP	3.83	3.26
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	14.00 kW	13.70 kW
COP Tj = -7°C	3.21	2.74
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	8.52 kW	8.37 kW
COP Tj = +2°C	5.67	4.45
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	5.50 kW	5.40 kW
COP Tj = +7°C	6.59	5.57
Cdh Tj = +7 °C	0.960	0.960
Pdh Tj = 12°C	4.37 kW	4.47 kW
COP Tj = 12°C	8.50	7.10
Cdh Tj = +12 °C	0.960	0.980
Pdh Tj = Tbiv	14.00 kW	13.70 kW
COP Tj = Tbiv	3.21	2.74
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.52 kW	9.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.90
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	24 W
PSB	24 W	24 W
PCK	24 W	24 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	23.13 kW	22.63 kW
Annual energy consumption Q _{he}	14890 kWh	17120 kWh
P _{dh} T _j = -15°C (if TOL		
COP T _j = -15°C (if TOL		
C _{dh} T _j = -15 °C		

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	224 %	165 %
Prated	10.10 kW	9.75 kW
SCOP	5.68	4.19
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	10.10 kW	9.75 kW
COP T _j = +2°C	4.19	2.88
C _{dh} T _j = +2 °C	0.990	0.990
P _{dh} T _j = +7°C	6.60 kW	6.35 kW
COP T _j = +7°C	5.69	3.87
C _{dh} T _j = +7 °C	0.980	0.980
P _{dh} T _j = 12°C	4.48 kW	4.30 kW
COP T _j = 12°C	7.47	5.66
C _{dh} T _j = +12 °C	0.960	0.960
P _{dh} T _j = T _{biv}	10.10 kW	9.75 kW
COP T _j = T _{biv}	4.19	2.88
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	10.10 kW	9.75 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.19	2.88
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.990	0.990
WTOL	60 °C	60 °C
Poff	24 W	24 W
PTO	24 W	24 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 Q _{he}	2375 kWh	3109 kWh