

This information was generated by the HP KEYMARK database on 23 Jun 2022

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Summary of	AEROTOP SG12 INOX / INOX OPTIC	Reg. No.	011-1W0475
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 SG12 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 SG12 INOX / INOX OPTIC

Configure model	
Model name	AEROTOP SG12 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 14511-2		
	Low temperature	Medium temperature
Heat output	7.15 kW	6.70 kW
El input	1.32 kW	2.12 kW
COP	5.40	3.16

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

Warmer Climate

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EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	220 %	154 %
Prated	8.24 kW	7.70 kW
SCOP	5.57	3.93
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.24 kW	7.70 kW
COP Tj = +2°C	4.56	2.95
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.30 kW	5.18 kW
COP Tj = +7°C	5.70	3.58
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	4.48 kW	4.30 kW
COP Tj = 12°C	7.47	5.54
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	8.24 kW	7.70 kW

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COP $T_j = T_{biv}$	4.56	2.95
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.24 kW	7.70 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	4.56	2.95
$C_{dh} T_j = TOL$ 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}	1977 kWh	2616 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	152 %	128 %

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Prated	17.66 kW	17.47 kW
SCOP	3.86	3.26
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.28 kW	11.16 kW
COP Tj = -7°C	3.63	3.04
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.82 kW	6.86 kW
COP Tj = +2°C	5.68	4.40
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.38 kW	4.38 kW
COP Tj = +7°C	6.35	5.54
Cdh Tj = +7 °C	0.960	0.960
Pdh Tj = 12°C	4.37 kW	4.47 kW
COP Tj = 12°C	8.25	7.10
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	11.28 kW	11.16 kW
COP Tj = Tbiv	3.63	3.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.93 kW	6.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.03	1.47
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.960	0.960

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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	10.73 kW	11.39 kW
Annual energy consumption Qhe	11889 kWh	13937 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL<-20°C)		
Cdh Tj = -15 °C		

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	206 %	150 %
Prated	12.63 kW	12.58 kW

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SCOP	5.23	3.83
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.17 kW	11.15 kW
COP Tj = -7°C	3.87	2.64
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.85 kW	6.76 kW
COP Tj = +2°C	5.27	3.95
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.37 kW	4.36 kW
COP Tj = +7°C	6.75	4.62
Cdh Tj = +7 °C	0.960	0.960
Pdh Tj = 12°C	4.34 kW	4.20 kW
COP Tj = 12°C	8.26	6.35
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	11.17 kW	11.15 kW
COP Tj = Tbiv	3.87	2.64
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.00 kW	10.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.99	2.27
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.960	0.960
WTOL	60 °C	60 °C

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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	1.63 kW	1.78 kW
Annual energy consumption Q _{he}	4984 kWh	6793 kWh